Report of the Task Force on

High Risk Pregnancies and Prenatal Record Systems

REPORT OF THE

FEDERAL TASK FORCE ON HIGH RISK PREGNANCIES

AND PRENATAL RECORD SYSTEMS

Également disponible en français sous le titre "Rapport du groupe fédéral de travail sur les grossesses à risque élevé et les systèmes d'enregistrement des données prénatales"

SUMMARY OF RECOMMENDATIONS OF THE

FEDERAL TASK FORCE ON HIGH RISK PREGNANCY

AND PRENATAL RECORD SYSTEMS

Foreword

This report is not a statement of federal government policy but represents an information base for further considered courses of action and potential policy development. It is hoped that this report will prove to be a useful guide for those professionals and para-professionals involved in providing pre-natal and peri-natal care to expectant mothers.

SUMMARY OF RECOMMENDATIONS OF THE FEDERAL TASK FORCE ON HIGH RISK PREGNANCY AND PRENATAL RECORD SYSTEMS

The following are the recommendations of the Federal Task Force:

RECOMMENDATIONS (SECTION II)

1. Each province in Canada should be encouraged to develop a prenatal record form for use by physicians undertaking obstetrical care.

2. The prenatal forms devised in each province should as far as possible be uniform in design and concept and should include a means of risk evaluation of the expectant mother using accepted risk predictors detailed in the body of this report.

3. Provision should be made for inclusion of the original prenatal record form in the mother's hospital record, a copy to be included in the neonatal hospital record and a copy to be retained in the physician's office record.

4. Provincial efforts to develop regionalized programs of perinatal care which have resulted in triage of high risk pregnancies according to their care requirements are laudable and should be encouraged throughout Canada.

5. Although the primary intent of the prenatal record form is to facilitate care of the pregnant woman by her physician, consideration should be given during the course of form design to inclusion of certain basic items of information which, if uniformly entered and collected, could be used for data retrieval and analysis.

RECOMMENDATIONS (SECTION III)

6. Properly designed studies into the validity of risk scoring systems should be encouraged and supported.

7. Risk assessment of the pregnant woman is of proven value and should be universally applied.

8. Properly conducted and controlled studies must be instituted to demonstrate the effect of length of work and type of occupation on pregnancy.

9. The cost implications of alternative work proposals to pregnant women and society must be evaluated.

10. Studies should be undertaken on the effect of toxic substances in the workplace, and their effects on the pregnant working woman and her fetus.

11. Prospective studies should be conducted to clarify the relationship of early pregnancy bleeding to pregnancy outcome, with special emphasis on congenital anomalies.

12. Well-controlled, prospective studies of the effect of nutritional supplementation and diet on the outcome of pregnancy are necessary.

13. A strong research effort should be made to elucidate the pathophysiology of pregnancy induced hypertension and its relationship to poor maternal outcome.

14. Adequately controlled prospective studies into post-term pregnancies must be carried out, with particular emphasis on fetal and maternal morbidity.

15. The Task Force recommends the continued support of prenatal care programs, with special emphasis on the detection of pregnancies at risk.

16. Continuing emphasis should be given to the humanization of the birthing process to maintain and improve psychological satisfaction of this family experience. However, the fundamental guiding principle of a responsible patient care provider must always be to maintain and protect the physical well-being of the mother and her infant.

17. Information is urgently required to assess the potential for long-term effects of ultrasound on the fetus.

18. Until such studies of long-term effects of ultrasound are completed, the use of routine ultrasound without specific indications in pregnancy should be discouraged.

19. Educational standards for ultrasonographers are required.

20. Properly designed prospective studies of antepartum and intrapartum fetal heart monitoring should be implemented to establish the validity of specific applications.

21. Properly designed trials should be carried out to delineate side effects on mother and fetus and attempt made to validate whether there is improvement in outcome by use of tocolytic agents.

22. Maternal-fetal transport should be undertaken whenever possible in preference to transport of the distressed neonate.

23. Programs of maternal transport within the framework of a regionalized system should be implemented uniformly throughout Canada in preference to neonatal transport.

24. Because of potential hazardous long-term effects, glucocorticoids to prevent respiratory distress in the neonate should only be administered when it is felt that their definite short-term benefits are essential.

25. Whereas the role of the nurse in reproductive care is recognized in many countries, it has not yet been agreed upon in Canada, and therefore the Committee proposes the establishment of a National Task Force to address this important issue. The "core" members of the Task Force should include clinical perinatal nurses plus obstetrical and pediatric perinatologists. Additional representatives should be appointed from appropriate medical and nursing professional bodies.

26. Neonatal morbidity should be precisely defined and its appropriateness to reflect the quality and effects of perinatal care delineated and evaluated.

RECOMMENDATION (SECTION IV)

27. The Task Force recommends that the foregoing definitions of uniform terminology for maternal and perinatal statistics be adopted for use throughout Canada. It is further recommended that these definitions be forwarded to the appropriate federal and provincial authorities for further discussion with a view to their implementation.

RECOMMENDATION (SECTION V)

28. An ad hoc committee of experts on prenatal and perinatal care be established and be charged with follow-up of the Report of the Canadian Commission for the International Year of the Child and of this Task Force report for the specific purpose of ensuring that Canadians attain optimal outcome of pregnancy as previously defined.

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I. GENERAL INTRODUCTION

A. BACKGROUND

There have been many significant advances in reproductive care in recent years. Application of new knowledge and techniques has resulted in progressive reduction in perinatal mortality rates in Canada to values which are now comparable with the best in the world. It is obvious however that mortality rates should not be the only criterion upon which the success of a nation's program for perinatal health care is judged: morbidity rates and client satisfaction are two other important criteria which must be taken into account if optimal outcomes are to be attained in what is a physiological and joyous event for the majority of the population.

This Federal Task Force on High Risk Pregnancies and Prenatal Record Systems was established in February 1981 by the Health Services Directorate of the Health Services and Promotion Branch. Its formation arose through a series of steps initiated by the Canadian Institute of Child Health (C.I.C.H.) in 1978 to attempt to improve the outcome of perinatal care in Canada. In that year studies were initiated, one result of which was formation of the Canadian Coalition for the Prevention of Handicaps Through Improved Prenatal and Perinatal Care. Other outcomes included preparation of a position paper and a book entitled "Priority of Priorities"[1] copies of which were sent to all Provincial ministers and their deputies and to the Federal Minister of Health and Welfare.

In 1979 the Report of the Canadian Commission for the International Year of the Child recommended that governments "adopt a policy making maternal and child health a priority for the next five years"[2].

In 1980, Monique Bégin, Minister of Health and Welfare, in a letter to the Chairman of the Board of the C.I.C.H., William Cochrane, M.D., F.R.C.P.(C), commending the Institute for its "role in stressing the need for improved perinatal care", suggested further discussions with her department to plan and develop a coordinated program.

These discussions prompted the formation of this Task Force in 1981. Its terms of reference, listed by M.M. Law, M.D., F.R.C.P.(C), Assistant Deputy Minister, Health Services and Promotion Branch, Health and Welfare, Canada, were as follows:

1. To discuss, develop and process a set of guidelines which will identify various maternal conditions which will aid health professionals in recognizing cases of high risk pregnancy.

2. To develop a prenatal record system which would have the potential for universal use and applicability.

B. PARTICIPANTS

The following were members of the Task Force:

Dr. Jack H. Walters, Chairman
Dr. Graham Chance
Dr. James Dunne
Dr. Martine Gagnon
Dr. Emily Hamilton
Dr. Karen Kaufman
Mrs. Joyce (MacDonald) Kaye
Dr. Bernard Leduc
Dr. Robert H. Lennox
Dr. T. MacLachlan
Dr. Thomas Martin
Dr. John Milligan
Dr. Ruth Milner
Dr. Ian Morrison
Dr. Leo Peddle
Mrs. Shirley Post
Dr. Donald Rae
Dr. D. Smith
Dr. H. Stewart

Consultants in Epidemiology and a clinical consultant group who provided valuable comments are listed in Appendix 2. This report was prepared by the members of the Committee who are practising health professionals and scientists with particular expertise and interest in perinatal care. The report is submitted to government but was not prepared by government. Valuable support from Dr. Lennox and his secretarial staff was provided to arrange the meetings, transcribe and translate the minutes and numerous task force documents, and in the preparation and printing of this final report. The document is intended for the use of practising health professionals who provide care for pregnant women and their infants. It is also planned to distribute it to Health Services planners at all levels of government, who require guidelines and standardized definitions for the development of improved systems of perinatal health care.

C. PREAMBLE

The concept of perinatal care has evolved from a time when there were no uniformly accepted definitions or specialized units, through to the development of an internationally accepted concept of high risk pregnancy and Perinatal Care units for high risk pregnancy patients and their infants, made available through regionalized programs.

The literature review and those citations in the bibliography in this report are limited to references concerning high risk pregnancies which have been published over the past 10 years. They are but a sample of the many publications in this important field, and include 368 references which have been reviewed by Dr. Ruth Milner and her group.

D. OBJECTIVES OF THE TASK FORCE

The specific objectives of the Task Force were projected into the above historical sequences. A number of the provinces have already developed systems whose stated objectives are to reduce perinatal mortality and morbidity. These provinces have developed record systems, interventions as well as personnel and facilities to accomplish these objectives. The Task Force studied the possibility of developing a set of uniform definitions for Canada, and the development of a set of "core markers" which could be considered for use by each province in modifying their existing prenatal record systems, if indicated or needed.

The conclusions and recommendations of the Task Force which follow are not intended to coerce or mandate the development of a single prenatal record form, method of management or system of health care of prenatal patients in any province. They are intended to establish standards for possible comparison of similar conditions, methods of management and outcomes in the perinatal field. Only through the cooperation of the members of the professional associations and the federal and provincial health care systems, will improvements evolve. As a group of concerned professionals, we urge that perinatal care be given the proper priority at all levels over the next years. We trust that this report will aid in such an evolution.

E. METHOD OF STUDY

The three main tasks of the Task Force for the study were allocated to three separate subcommittees which were asked to review the literature and prepare reports which could be studied and approved by the main Task Force.

The Subcommittee on Prenatal Records was chaired by Dr. I. Morrison. The report of this Committee is summarized in Section II and given in detail in Appendix 3.

The second Subcommittee under the chairmanship of Dr. B. Leduc and Dr. J. Milligan was given the more difficult task of defining high risk pregnancies. After their initial meeting they met with the whole committee, and the following motion was adopted in recognition of our concern over certain essential aspects of modern care.

"Recognizing the concern of the Health Care Professions and of the general public over the apparently high incidence of 'High Risk Pregnancies', it is moved that the validity of currently used predictors of unfavourable outcome of viable pregnancies and the basis upon which the outcomes are identified, be evaluated."

Dr. Ruth Milner agreed to serve on the Task Force to provide the expertise and supervision for these evaluations.

The Subcommittee on Definitions under the chairmanship of Dr. Leo Peddle, developed the section which is included in the report entitled "Uniform Maternal and Perinatal Terminology". This section has been forwarded to the recently-formed National Committee on Perinatal Terminology which has representatives from Statistics Canada as well as this Task Force to be used as the basis for a set of uniform definitions which could be acceptable to provincial registrars and federal authorities.

II. PRENATAL RECORDS

A. CONTENT

In the medical or social history of a pregnant mother and findings on physical and laboratory examination, there may be "markers" or "factors" which indicate potential problems for the mother or child. These "markers" may be identified at an early stage of pregnancy or may develop at any time throughout the pregnancy, up to the time of onset of labour and delivery.

The factors sampled, and assessed by family physicians, obstetricians and nurses in the management of the pregnant mother undergoing prenatal care, may be recorded on specifically designed forms called prenatal record forms. These forms are used by the health care team for documenting ongoing care of pregnant mothers. They are usually designed so that they are easily identified as separate and specific records for use in offices, clinics and hospital medical record departments.

The history of the development of the prenatal record and the increasing sophistication of its content over the past half century, mirrors the development of the specialty of perinatology. There was a reduction of international maternal and perinatal mortality rates as techniques to detect and manage major obstetrical and neonatal complications became known. To a limited extent this reduction was accompanied by a lowering of morbidity in these same risk situations. However, as outcomes have improved perinatal mortality has approached its "irreducible minimum" and reduced morbidity of perinatal origin must nowadays be regarded as the prime focus of effective care.

B. UNIFORMITY

To improve the identification of pregnant women "at risk" and to provide a standard guideline for the health care team

documenting the numerous factors evaluated throughout the prenatal period for all pregnant mothers, groups of health professionals developed comprehensive prenatal records. Initially these records were utilized only for ambulatory patients in offices and clinics, but gradually hospitals, cities, regions and eventually provinces developed uniform prenatal records. During their evolution, prenatal records have undergone many user trials. In general the following changes can be identified:

1. The format of the record became more standardized.

2. Certain items of information were cited in specific areas of the record (e.g. obstetrical history or last menstrual period).

3. Sections of the record were developed for notations of follow-up or management (e.g. weight, blood pressure, fetal health).

4. The items or factors recognized to be required for prenatal management became accepted (e.g. blood group, Rhesus type and antibodies, Rubella titre).

5. New research findings used in this sorting or identification of risk became incorporated (e.g. symphysis-fundus height measurements, ultrasound).

Specific areas for recording of cervical cytology and for listing of pertinent personal, medical, family or social factors became established as integral aspects of the prenatal record. Concurrent with development of prenatal records, the principle that certain pregnancies benefit from special care has become more widely established and accepted.

C. INCLUSION IN HOSPITAL RECORDS

With improvements in prenatal data acquisition and recognition of the significance of prenatal events for postnatal outcomes, there was a recognition of the importance of the prenatal record in the management of the mother and her infant, to act as a vehicle to transmit information to the labour, delivery and postnatal wards of the hospital in which she was to give birth.

At first only the blood group, Rhesus type and serology report were seen to be required. Eventually blood pressure, total weight gain, hemoglobin, investigations and treatments carried out during the prenatal period and other information was realized to be needed by the perinatal team. As a result, the record is now usually in multicopy format. In most instances, one copy is sent to the hospital and the original is kept in the doctor's office or clinic. In some provinces an additional copy is sent to the neonatal chart. In many hospitals in Canada, the by laws of the hospital oblige all practitioners to forward to the hospital a copy of the prenatal record for each patient who is to be admitted in labour to that hospital. Most provinces now have standardized prenatal records for this purpose.

Recommendation #1. Each province in Canada should be encouraged to develop a prenatal record form for use by physicians undertaking obstetrical care.

Recommendation #2. The prenatal forms devised in each province should as far as possible be uniform in design and concept and should include a means of risk evaluation of the expectant mother, using accepted risk predictors detailed in the body of this report.

Recommendation #3. Provision should be made for inclusion of the original prenatal record form in the mother's hospital record, a copy to be included in the neonatal hospital record and a copy to be retained in the physician's office record.

A more detailed discussion of the content, design and purpose of the prenatal record is found in Appendix 3.

D. PERINATAL CARE PROGRAMS

The dramatic reduction of maternal and perinatal deaths and the concomitant reduction in morbidity for both mothers and their newborns over the past 15 years in Canada is not only due to improved housing, food or transportation. It is also due to the recognition that a proportion of all pregnant women, probably less than 25 per cent, have increased risk perhaps due to some unrecognized problem(s), that require(s) these women to be managed differently from the remainder. Over the past 15 years, these "risk" patients have been identified, more appropriately managed, and their perinatal death and morbidity rates reduced as a result of application of various interventions by health care teams.

A major component of this improvement has been accomplished through education of mothers-to-be to the recognition that their pregnancy is indeed "at risk" and that there are possibilities for improving the outcome for many of them.

The progressive improvement in perinatal statistics in all regions of Canada attests to the impact of these programs.

The system of health care delivery has been modified over the same period of time so as to ensure availability of special care for those mothers with particular needs. Facilities have been developed on a regional basis to provide teams of personnel specifically trained to care for the identified high risk patient, her fetus and newborn. These teams have been based in specially designed and equipped perinatal units which are the designated centres for regional educational programs and for referral of women with complicated pregnancies. In conjunction with the other institutions and professionals in the region, the facilities serve as resource centres to provide the expertise necessary to bring about improved care. This phenomenon of "regionalization of medical care" is well established for other special medical problems, including

cancer, trauma, renal dialysis and genetics. Such an approach has been shown to ensure equitable availability of costly programs and to improve outcome for these special medical conditions.

Recommendation #4. Provincial efforts to develop regionalized programs of perinatal care which have resulted in triage of high risk pregnancies according to their care requirements are laudable and should be encouraged throughout Canada.

For the small number of instances in which either mother or baby dies or in which there is a continuing disability of the mother or child, anguish and suffering may be prolonged. Moreover, the health care cost for continuing care of damaged infants and children is a financial burden for the family and for society for many years. Further reduction of perinatal mortality and morbidity among the offspring of those pregnant mothers who are identified at risk, will thus be to the benefit of society. Achievement of this aim will require better understanding of causal factors, many of which originate prenatally. Record linkage of information concerning the social, economic and educational background of the woman and her partner is important in long-term assessment of risk factors.

Recommendation #5. Although the primary intent of the prenatal record form is to facilitate care of the pregnant woman by her physician, consideration should be given during the course of form design to inclusion of certain basic items of information which, if uniformly entered and collected, could be used for data retrieval and analysis.

E. DEFINITIONS OF RISK PREGNANCY

A consensus was reached by the Task Force that the definition of high risk pregnancy was dependent upon the sum total of the markers which individually are associated with increased risk during a pregnancy. There were three groups of markers identified by the Task Force as follows:

a) Risk Markers

These are factors which have been accepted and are currently being used in clinical practice as indicators of some degree of increased risk in any pregnancy. An example is maternal diabetes.

b) Outcome Markers

Unfavourable outcome events which can be identified and are valid as the current markers for at least this pregnancy. Examples would be maternal sepsis or intraventricular hemorrhage.

c) Intervention Markers

These are techniques or factors which have a positive or negative influence on the management and/or outcome of the pregnancy. An example would be the measurement of lecithin-sphingomyelin ratio in the amniotic fluid as a predictor of pulmonary maturity.

Based on a consensus of clinical experience, the following factors thought to influence the pregnant patient, the fetus or the neonate, were listed by the Committee and placed in the following categories, according to priority, for methodological evaluation of their literature:

1. Those factors which were so well recognized or "obvious" that no further research or statistical assessment was felt necessary to validate them as markers (low priority for study).

2. Those factors with high priority to establish validity as markers of high risk pregnancy.

The listing by category which included Risk, Outcome and Intervention markers is as follows:

a) Risk Markers

1 (Obvious)

1) low birth weight infant
2) smoking
3) previous fetal or neonatal death
4) drugs (non-medical)
5) medical disorders
6) antibodies (Rh, Rubella, etc.)
7) alcohol ingestion
8) gestational diabetes
9) no prenatal care
10) multiple pregnancy
11) premature rupture of membranes
12) prematurity
13) abnormal position of fetus
14) abnormal presentation of fetus
15) anesthetic coverage and resuscitation
16) scalp sampling of fetal blood

2 (Validity to be Established)

1) time of first attendance for prenatal care
2) urinary tract infection
3) therapeutic abortion history
4) pre-pregnancy weight
5) pre-pregnancy height
6) socioeconomic status
7) nutrition
8) alpha-feto protein
9) age - under 20 years
   - over 35 years
10) occupation - mother (not specifically father)
11) validity of standard form used
12) validity of risk screening form used
13) bleeding
14) hypertension (two readings 20 minutes apart)
15) pregnancy longer than 42 weeks
16) labelling of patient high risk
17) screening with non-stress test
18) prenatal classes attendance
19) place of birth (home vs. hospital)
20) size of hospital (either in or out of functioning regional hospital system)

b) Outcome Markers

1 (Obvious)

1) respiratory distress syndrome
2) intraventricular hemorrhage
3) sepsis
4) genetic and developmental abnormalities
5) broncho-pulmonary dysplasia

2 (Validity to be Established)

1) anemia
2) bilirubin
3) fractures
4) small for gestational age
5) seizures
6) cerebral palsy
7) mental retardation
8) neurological abnormalities at discharge
9) low Apgar (< 7 at 5 minutes)
10) metabolic acidosis (cord pH < 7.2)

c) Intervention Markers

1 (Obvious)

1) skilled neonatal transport
2) maternal-fetal transport

2 (Validity to be Established)

1) who does the delivery (G.P., Obs., midwife)
2) maternal-fetal transport versus neonatal transport
3) bed rest
4) operative delivery (Cesarean, forceps)
5) induction
6) glucocorticoids
7) tocolytic agents

Funding was made available to Dr. Milner and her staff for a research project to review the above list of markers which were discussed and categorized by the members of the Task Force. The objective was to make a critical assessment of the validity of the scientific methodology used in evaluation in published studies relating to these markers and to explore areas where their use was less than optimal.

The section on methodology outlines the stringent review methods used by Dr. Milner and her group. The section entitled Intervention and Outcome Variables outlines the results of these extensive reviews. The comments and recommendations of the Task Force for areas of further study and development are based on these studies.

III. EVALUATION OF PREDICTORS, INTERVENTIONS AND OUTCOME VARIABLES

INTRODUCTION

Pregnancy is a natural process, however complications may develop and thus incur risks to the mother or child. The natural reproductive process ensures survival of the species, but on an individual basis does not guarantee a problem-free pregnancy nor a healthy newborn. The intent of modern perinatal care is to optimize the birth of an infant with full potential while maintaining minimal risk to the mother.

In order to be effective in preventing problems, risk detection must be prospective. The establishment of predictive factors has been dependent largely upon retrospective evaluation. Some complications in pregnancy may be immediate and unpredictable, for example the occurrence of premature rupture of the membranes at 27 weeks, or cord prolapse in an otherwise apparently healthy pregnancy. In contrast, past events, such as the history of premature rupture of membranes at 27 weeks in a previous pregnancy, indicate a potential for risk in a current pregnancy, yet in the majority of patients a healthy outcome will ensue.

This Task Force has examined factors believed to be associated with increased risk of adverse outcome which may be used to alert the physician to actual or potential problems. Some, which were considered non-controversial and generally accepted, are only listed (Section B). Other factors claimed in the literature to be predictive and/or to be appropriate interventions, but which are controversial, have been extensively scrutinized with regard to their proven epidemiologic validity as predictors of problems or interventions considered beneficial to patient management (Sections C and D).

A. EPIDEMIOLOGIC METHODOLOGY

The criteria for assessment of the quality of the evidence were based on those used by the Canadian Task Force on the Periodic Health Examination[3].

Three aspects were reviewed. They were:

- the current burden of suffering;
- the validity and acceptability of the manoeuvre used to identify the risk of condition;
- the effectiveness of the resulting intervention.

Only the latter two aspects were reviewed in detail.

To obtain the appropriate literature, a Medline Search for the previous two years was run for each risk marker or intervention, and recent articles were solicited from colleagues. From articles cited, other references were culled from the bibliographies attached to each and a library was thus assembled around every marker. A positive decision was made not to review literature prior to 1975 because it was felt that recent evidence would be more valuable. Only in rare cases was the search taken further; either because the best articles were published earlier and still reflected current evidence, or because there was a dearth of recent articles.

To assess the quality of evidence contained in the articles, the criteria for judging diagnostic tests or evaluating the effectiveness of interventions were taken from the series of critical appraisal articles which appeared in the Canadian Medical Association Journal in 1981 under the title of Clinical Epidemiology Rounds[4]. An attempt was made to cover the three aspects already mentioned as fully as possible but lack of time, data and appropriate references precluded a complete review, especially in regard to the current burden of suffering.

An example of the application of the literature appraisal methods used is given in the review of the literature on Intrapartum Fetal Monitoring in Appendix 4.

B. ACCEPTED RISK PREDICTORS

1. Previous Obstetrical Performance

Past obstetrical history has a strong predictive value for the current pregnancy. This contribution is unfortunately not available for nulliparas and even in multiparas is not absolutely predictive.

Low birth weight infants (<2.5 kg)
Perinatal death
Habitual abortions (3 or more consecutive)
Birth injury
Congenital anomalies
Genetic disease
Grand multiparity
Previous Cesarean section

2. Maternal Medical Factors

Recognition of these factors is important because appropriate intervention will minimize complications.

Medical disorders in pregnancy (e.g. diabetes, hypertension, etc.)
Isoimmunization
Family history of genetic disease
Maternal age (≤16 years, or ≥35 years)
Rubella susceptibility
Uterine surgery or abnormality

3. Socioeconomic Factors

Extremes of unfavourable socioeconomic and cultural factors produce detrimental effects on the pregnancy.

Poverty and starvation
No prenatal care
Alcoholism
Heavy smoking
Drug abuse

4. Fetal and Maternal Factors Arising During Pregnancy

These factors affirm the importance of early and ongoing prenatal care for the detection, assessment and management of actual or potential problems in pregnancy.

Multiple pregnancy
Intrauterine growth retardation
Concurrent infection (e.g. Rubella, herpes, toxoplasmosis, syphilis)
Fetal disease (e.g. hydrops, genetic diseases, congenital anomalies)
Polyhydramnios
Oligohydramnios
Maternal disease (e.g. pregnancy induced hypertension (PIH), gestational diabetes, anemia)
Antepartum bleeding
Isoimmunization

5. Labour and Delivery Factors

Previously identified risk factors may well persist at the time of onset of labour; however, additional and non-predicted complications may arise during labour and delivery. These may be associated with major problems and can require urgent and immediate attention.

Preterm labour
Premature rupture of membranes
Prolonged labour
Malpresentation and/or Malposition
Prolapsed cord
Traumatic birth
Passage of Meconium
Intrapartum asphyxia
Intrapartum bleeding
Neonatal asphyxia
Congenital anomalies interfering with neonatal adaptation
(e.g. diaphragmatic hernia)

C. CONTROVERSIAL PREDICTORS

1. Risk Scoring is the numerical weighting of individual and combined risk factors which are added up to a cumulative score.

Risk Assessment is the clinical evaluation of the significance of individual risk factors.

Risk scoring has been reported to correlate with perinatal outcome. However, when subjected to strict epidemiological analysis, the validity of these correlations is questionable.

Properly designed studies have not yet been published which tested the hypothesis that risk scoring by itself modified perinatal outcome. However the proper application of clinical assessment of risk factors (Section B, 1-5) has been associated with improved perinatal outcome for individuals.

The educational value, especially to the health care provider, in the use of risk scoring and/or risk assessment, when applied to a population of pregnant women, is recognized [5-33].

COMMENTS ON RECOMMENDATIONS

It is apparent that although there are many factors which may potentially increase the risk of adverse outcome of pregnancy, there is urgent need for further research to determine whether these factors represent real or imagined risk, or whether certain interventions have real or imagined benefit. Evaluation of the significance of some factors may be precluded because studies designed to test them may be too complex and impractical or may contain major ethical obstacles. Likewise, certain accepted intervention procedures of imprecisely defined value also may be difficult to withdraw.

Recommendation #6. Properly designed studies into the validity of risk scoring systems should be encouraged and supported.

Recommendation #7. Risk assessment of the pregnant woman is of proven value and should be universally applied.

2. Length of Work and Occupation During Pregnancy

Currently there are no adequate data nor published reports to answer the questions of the effect of length of work or the type of occupation on pregnancy and its outcome.

This area has become of major importance as the number of women of childbearing age entering the work force has increased consistently over the past number of years. Moreover, legislation, union contracts, and job benefits for working pregnant women make the answers to these questions of a great practical importance. The main conclusion of the American College of Obstetricians and Gynecologists in their report for the U.S. Department of Health and Education states that "The normal woman with an uncomplicated pregnancy and a normal fetus in a job that presents no greater potential hazards than those encountered in normal daily life in the community, may continue to work without interruption until the onset of labour and may resume working several weeks after an uncomplicated delivery". However, while accepting

the concept of work throughout pregnancy, this conclusion reveals the lack of factual data necessary to advise pregnant women.

The economic implications, both of working restrictions and of cost of benefits need to be delineated with respect to the individual and society. The effects of work within the home on pregnancy and its outcome, the relationship of stress, socio-economic factors, etc. to employment and pregnancy must be clarified. The relationship of non-employment related activities such as crafts, athletics, etc. have not been evaluated and need to be outlined.

Recent trends in Canada concerning the employment of pregnant women, and the financial and social implications of such changes are a major issue in our society today [34-41].

Recommendation #8. Properly conducted and controlled studies must be instituted to demonstrate the effect of length of work and type of occupation on pregnancy.

Recommendation #9. The cost implications of alternative work proposals to pregnant women and society must be evaluated.

3. Toxic Exposures and Congenital Abnormalities

Precise identification of potential responsible agents, exposure levels, and susceptible periods during pregnancy are lacking in most studies. Spontaneous abortion is reported as increased in operating room personnel, in steel smelting workers, and in those working in styrene or rayon production. Congenital abnormalities are reported in higher prevalence among children of gardeners, switchboard operators, reinforced plastic production, steel smelting workers, pharmaceutical laboratory workers, operating room workers and workers using organic solvents. Intensive studies in these women and in those working in other fields such as those working with Visual Display Terminals are needed to clarify exposure risks in pregnancy.

Recommendation #10. Studies should be undertaken on the effect of toxic substances in the workplace, and their effects on the pregnant working woman and her fetus.

4. Early Antepartum Bleeding and Pregnancy Outcome

Early antepartum bleeding prior to 20 weeks does warn of some increased risk of late pregnancy complications, namely, premature birth, congenital anomalies, and increased perinatal mortality. The Ontario Perinatal Mortality Study [64] showed a premature birth rate of 5.9% in patients with no early bleeding and 14.5% in patients with early bleeding. The perinatal mortality rate was also increased from 22.9 to 65.2 in those without bleeding compared to those with bleeding. The only studies showing an increased congenital anomaly rate were retrospective and therefore included a strong recall bias[42-53].

Recommendation #11. Prospective studies should be conducted to clarify the relationship of early pregnancy bleeding to pregnancy outcome, with special emphasis on congenital anomalies.

5. Nutritional Supplement

Although much is written of the importance of good nutrition in pregnancy and there is some correlation between low pre-pregnancy weight and low weight gain with low birth weight babies, nutritional supplementation alone has not been shown to have a direct effect on pregnancy outcome. Many study design problems exist in published articles, such as failure to ascertain whether the supplement was actually eaten, whether the intended supplement was actually taken in addition to usual diet or if it simply substituted for the normal diet. Such study defects generally preclude adequate evaluation of the effects of supplemental nutrition[54-72].

Recommendation #12. Well controlled, prospective studies of the effect of nutritional supplementation and diet on the outcome of pregnancy are necessary.

6. Blood Pressure Elevation: Maternal Significance

Pregnancy may unmask latent hypertension but information on the early and late consequences to the mother is scant. Severe pregnancy induced hypertension remains one of the leading causes of maternal mortality[73-93].

Recommendation #13. A strong research effort should be made to elucidate the patho-physiology of pregnancy induced hypertension and its relationship to poor maternal outcome.

7. Post-Term Pregnancy

Because perinatal mortality is relatively low after post-term pregnancy, the use of this marker for statistical analysis is limited. However, descriptive studies report increased incidence of induction of labour, meconium stained amniotic fluid, and Cesarean section, and indicate the need for further investigation with an emphasis on morbidity[94-102].

Recommendation #14. Adequately controlled prospective studies into post-term pregnancies must be carried out with particular emphasis on fetal and maternal morbidity.

D. CONTROVERSIAL INTERVENTIONS

1. Prenatal Care: Providers and Programs

Very few studies have adequately examined the relationship between the training and qualifications of prenatal care providers and pregnancy outcome. The difficulties inherent in such studies almost preclude their satisfactory completion (e.g. the frequency of prenatal examination and the timing of the first visit are closely related to socio-economic factors which themselves affect pregnancy outcome).

It was interesting to note that in one study in family practice in which prenatal care was randomly allocated to either physician or nurse practitioner, no difference was shown in outcome.

Studies in rural communities have demonstrated significant improvement in outcome when prenatal care programs conducted by nurse-midwife were introduced where no programs previously existed. From the evidence reviewed, it is clear that the difficulties inherent in conducting studies of the effectiveness of prenatal care programs or their provision by different personnel, have almost precluded their satisfactory completion[103-115].

Recommendation #15. The Task Force recommends the continued support of prenatal care programs with special emphasis on the detection of pregnancies at risk.

2. Childbirth Education Programs

Recent emphasis on childbirth education programs and their possible impact on perinatal outcome has been a source of major controversy. For this reason, it was felt important to validate the suggested beneficial effects of these programs. Unfortunately, their content and evaluation criteria differ amongst all studies, making validity assessment impossible.

A second question has related to the efficacy of these particular interventions, and again the reports in the literature are fraught with difficulties because of methodological problems. However the use of analgesia, anesthesia and forceps is generally decreased in those women who have participated in such programs.

There is no difference in length of labour, frequency of complications, birth weight, or Apgar score but there does tend to be a greater psychological satisfaction with the birth experience.

Unfortunately, none of the studies examined cost benefits or effectiveness. No long-range benefits have been demonstrated. It does not appear that possible disadvantages such as unrealistic expectations or aims have actually been examined. It is difficult to assess effectiveness of the intervention as the goals addressed by the various approaches are diverse[116-137].

Recommendation #16. Continuing emphasis be given to the humanization of the birthing process to maintain and improve psychological satisfaction of this family experience. However, the fundamental guiding principle of a responsible patient care provider must always be to maintain and protect the physical well-being of the mother and her infant.

3. Ultrasound

Ultrasound examinations are helpful in the detection of anomalies, assessment of gestational age, multiple gestation, placental localization, and fetal heart rate and movement. The benefits of ultrasound scanning vary with the particular function expected from it. As far as fetal growth is concerned, there seems to be very good evidence that ultrasound is a useful adjunct to clinical identification and assessment of intrauterine growth retardation.

Ultrasound is also useful to determine fetal age when it is used rationally and early in pregnancy. While there have been few prospective controlled studies, it appears clear to the Committee that ultrasound is necessary prior to amniocentesis[138-201].

Recommendation #17. Information is urgently required to assess the potential for long-term effects of ultrasound on the fetus.

Recommendation #18. Until such studies of long-term effects of ultrasound are completed, the use of routine ultrasound without specific indications in pregnancy should be discouraged.

Recommendation #19. Educational standards for ultrasonographers are required.

4. Intrapartum Electronic Heart Rate Monitoring

Fetal Heart Rate Monitoring was introduced to help to identify the fetus in distress, so that appropriate intervention could be considered. Most studies show that electronic fetal monitoring has a high negative predictive value, that is, a normal tracing is very likely to be associated with a non-asphyxiated infant. Unfortunately, an abnormal tracing does not correlate as well with poor outcome and therefore must be interpreted with all other available data. The National Institute of Child Health and Development's Consensus Development Task Force on Antenatal Diagnosis and the Society of Obstetricians and Gynecologists of Canada suggest that the use of electronic monitors be strongly considered in "high risk" patients. There is no acceptable evidence to indicate any beneficial effects of electronic fetal monitoring in the pregnancy with no identified risk.

Because of the complexity and importance of evaluation of intrapartum fetal monitoring, the concerned reader is referred to Appendix 4.

Antepartum and intrapartum fetal heart rate monitoring are widely utilized in Canada today and are of apparent value. However, the literature is lacking in adequate studies to assess some of the applications of these techniques (202-243).

Recommendation #20 Properly designed prospective studies of antepartum and intrapartum fetal heart monitoring should be implemented to establish the validity of specific applications.

5. Tocolytics

Premature delivery is the most important contributor to perinatal mortality and morbidity. Prevention and treatment of premature labour are therefore of particular importance.

Effectiveness of tocolysis is difficult to assess due to methodological problems (e.g. in defining premature labour, in obtaining placebo medication with similar side effects to minimize observer bias, sample size, standardization of terminal objectives). Examination of reports shows that the objective of treatment was not always similar (e.g. to delay delivery for 24 to 48 hours, to reduce incidence of RDS or deaths, or to increase the number of term deliveries)[244-283].

Recommendation #21 Properly designed trials should be carried out to delineate side effects on mother and fetus and attempt to validate whether there is improvement in outcome by use of tocolytic agents.

6. Maternal versus Neonatal Transport

Precise assessment of the benefit of neonatal versus maternal transport is not possible since no randomized trial of transport versus retention of the mothers or neonates in non-specialized centres has been carried out. All reported studies have major methodological problems, not the least of which relates to the fact that in neonatal transport, the patients are selected before transport by evidence of illness, or

excluded where hopeful survival does not appear to be present. By contrast, selection of mothers for maternal transport is based on either current or potential problems. It seems apparent that fetuses requiring intensive and specialized care around birth would benefit from transfer to centres where that expertise is readily available. For this reason, although desirable, it seems that a randomized trial would be unethical.

Maternal transport for the sake of fetal or maternal potential problems has been accepted by the profession and all provincial health ministries in Canada. The concept of transporting the fetus at risk in utero to the perinatal team at an appropriate centre has reached a consensus in theory. This Committee strongly supports this concept.

Implementation of the concept of maternal-fetal transport is still inadequate because of application problems and lack of support at various levels of responsibility[284-302].

Recommendation #22. Maternal-fetal transport should be undertaken whenever possible in preference to transport of the distressed neonate.

Recommendation #23. Programs of maternal transport within the framework of a regionalized system should be implemented uniformly throughout Canada in preference to neonatal transport.

7. Amniotic Fluid Assays

Measurement of amniotic fluid optical density is of proven value in the management of isoimmunization as is the use of amniotic fluid for assessment of risk of certain genetic abnormalities in appropriately selected mothers. A large number of studies over the last several years on many of the

constituents of amniotic fluid have not proved to be of clinical use relative to fetal maturity. The major reviews at the present time relate to measurement of amniotic fluid phospholipids and especially the relationship of the Lecithin-Sphingomyelin (L/S) ratio to prediction of fetal lung maturity. There is a large body of evidence which supports the validity of these tests in relation to outcome. A review of the literature strongly supported this conclusion. These reviews did not include the disorders where the L/S ratio is of lessened value, for example in the diabetic pregnancy.

There was no review of the usefulness of the more recently recognized constituents of amniotic fluid such as phosphatidylglycerol (PG). However the Committee recognizes that this is an area of great promise[303-311].

8. Glucocorticoids and Enhanced Fetal Lung Maturity

The Committee wished to make a statement concerning this controversial therapy in the prevention of respiratory distress syndrome (RDS) in the premature infant, but time constraints precluded detailed literature review.

Two randomized clinical trials showed that glucocorticoids reduced the incidence of respiratory distress syndrome (RDS) but there has not been a clear demonstration of decreased perinatal mortality. There is no evidence of significant adverse short-term effects but long-term side effects potentially exist and are being evaluated (reference N.I.H. study).

Recommendation # 24. Because of potential hazardous long-term effects, glucocorticoids to prevent respiratory distress in the neonate should only be administered when it is felt that their definite short-term benefits are essential.

9. Intrapartum Care - Obstetrician, General Practitioner or Nurse in Reproductive Care

There are no Canadian studies available as the practice of Obstetrics by other than licensed physicians is not legal in Canada. Studies from the United States suggest that nurse-midwife practices are a safe, economical and acceptable means of providing obstetrical care to selected groups of women. The evidence is inconclusive to the extent that findings are confounded by:

1. A variety of practice settings from home to free-standing and hospital-based birth centres and regular hospital delivery suites.

2. Differing eligibility criteria for the nurse of reproductive care clients (and other selection factors).

3. Joint practice management and transfer to physician care at various points in the pregnancy.

The outcome of the studies can be classified under three broad areas, namely Safety, Acceptability and Cost. None of the studies demonstrated increased perinatal mortality as a result of supervision by a nurse in reproductive care. No study specifically addressed acceptability although all studies concluded that on the basis of continued demand and referral the system was acceptable. Despite initial reservations on the part of some physicians, all studies report eventual acceptance of the nurse in reproductive care service.

There are no Canadian data which examine the role of the family doctor vis-à-vis the obstetrician. Specialists are functioning as primary care physicians for many pregnant women and many family doctors do not practise obstetrics.

It would seem that there is a complementary role for each of the three: nurse in reproductive care, family physician and obstetrician. Any system will be most efficient when personnel are utilized appropriately according to their level of training (312-322).

Recommendation #25. Whereas the role of the nurse in reproductive care is recognized in many countries, it has not yet been agreed upon in Canada, and therefore the Committee proposes the establishment of a National Task Force to address this important issue. The "core" members of the Task Force should include clinical perinatal nurses plus obstetrical and pediatric perinatologists. Additional representatives should be appointed from appropriate medical and nursing professional bodies.

10. Mortality and Morbidity

There is general recognition that perinatal mortality may not be an adequate indicator to reflect quality of perinatal care or to highlight areas where preventive activity is required. However, neonatal morbidity has not been precisely defined. A study of some area of morbidity (e.g. neonatal seizures, mental retardation and cerebral palsy) might in part accomplish such a goal.

Recommendation # 26. Neonatal morbidity should be precisely defined and its appropriateness to reflect the quality and effects of perinatal care delineated and evaluated.

IV. REPORT OF THE SUBCOMMITTEE ON UNIFORM MATERNAL AND PERINATAL TERMINOLOGY

INTRODUCTION

At an early meeting of the Task Force on High Risk Pregnancy it was requested that uniform definitions of perinatal terminology be developed. Considerable work has been carried out in this area during the past 10 years. The Subcommittee used the following documents for developing recommendations for standardization of maternal and perinatal terminology:

1. Recommendations of the Perinatal Medicine Committee of the Society of Obstetricians and Gynecologists of Canada and the Fetus and Newborn Committee of the Canadian Pediatric Society, October 1974.

2. Information paper entitled "Hospital Perinatal Committee" published by the Canadian Institute of Child Health in 1981 and printed in "Dimensions in Health Care Services", 1979.

3. Williams Obstetrics, Sixteenth Edition, by Pritchard and MacDonald.

RECOMMENDED UNIFORM DEFINITIONS

Birth

Birth is the complete expulsion or extraction from its mother of a fetus weighing 500 g or more, irrespective of the gestational age.

Livebirth

Livebirth is the birth of a fetus, irrespective of gestational age, weighing 500 g or more which after its complete expulsion or extraction,

breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of the voluntary muscles.

Stillbirth (Fetal Death)

Stillbirth is the birth of a fetus weighing 500 g or more, irrespective of gestational age, who shows no sign of life after birth.

Abortion

Abortion is the complete expulsion or extraction from its mother of a fetus or embryo weighing less than 500 g irrespective of gestational age, whether there is evidence of life or not, and whether the abortion was spontaneous or induced.

Preterm Infant

An infant born before the 37th completed week of gestation (less than 259 days).

Term Infant

An infant born during a period beginning at the 37th completed week of gestation and extending to the 42nd completed week (259 to 293 completed days).

Post Term Infant

An infant born after 42 completed weeks of gestation (294 days or more).

Low Birthweight

A fetus or infant weighing less than 2500 g but 500 g or more at birth.

Full Birthweight (full size)

A fetus or infant weighing 2500 g or more at birth.

Birthweight

Refers to the first weight of the fetus or newborn obtained after birth. This weight should be measured within the first hour of life before

significant postnatal weight loss has occurred.

Recommended birthweight groupings:

500 g, up to and including 749 g
750 g, up to and including 999 g
1000 g, up to and including 1249 g
1250 g, up to and including 1499 g
1500 g, up to and including 1999 g
2000 g, up to and including 2499 g
2500 g, up to and including 2999 g
3000 g, up to and including 3499 g
3500 g, up to and including 3999 g
4000 g, up to and including 4499 g
4500 g, up to and including 4999 g
5000 g, and over

Early Neonatal Period

The interval after birth but during the first 7 completed days of life.

Early Neonatal Death

Death of a liveborn infant weighing 500 g or more at birth, during the first 7 completed days of life.

Early Neonatal Mortality Rate

The early neonatal mortality rate is the number of early neonatal deaths of infants weighing 500 g or more, per 1000 liveborn infants.

Late Neonatal Period

The interval beginning after 7 and up to 28 completed days of life.

Late Neonatal Death

Death of a liveborn infant weighing 500 g or more at birth after 7 but before 28 completed days of life.

Late Neonatal Mortality Rate

The late neonatal mortality rate is the number of late neonatal deaths of infants weighing 500 g or more, per 1000 liveborn infants.

Fetal Death (Stillbirth)

Stillbirth is the birth of a fetus weighing 500 g or more, irrespective of gestational age, showing no sign of life after birth.

Fetal Death Rate (Stillbirth Death Rate)

The stillborn infant rate is the number of stillborn infants weighing 500 g or more, per 1000 total births.

Perinatal Period

The interval from the time a fetus attains a weight of 500 g through to the first 7 completed days of intrauterine life.

Perinatal Death

Stillborn and liveborn infants, both weighing 500 g or more who died before birth, at birth, or during the first 7 completed days of life.

Perinatal Mortality Rate (500 grams or more)

$$\frac{\text{Fetal Deaths + First Week Neonatal Deaths (both 500 grams or more)}}{\text{Livebirths + Fetal Deaths (both 500 grams or more)}} \times 1000$$

Standard Perinatal Period

The interval from the time a fetus attains a weight of 1000 g through the first 7 completed days of life.

Standard Perinatal Death

Stillborn and liveborn infants, both weighing 1000 g or more who died before birth, at birth, or during the first 7 completed days of life.

Standard Perinatal Mortality Rate (1000 grams or more) (international)

$$\frac{\text{Fetal Deaths + First Week Death (both 1000 grams or more)}}{\text{Livebirths + Fetal Deaths (both 1000 grams or more)}} \times 1000$$

Note: "First Week" to be interpreted as seven periods of 24 hours.

Maternal Death

Death that occurs as a result of the reproductive process and which is made up of direct maternal deaths and indirect maternal deaths.

Direct Maternal Death

Death of the mother resulting from obstetric complications in the pregnancy state, labour or peurperium and from interventions, omissions, incorrect treatment or a chain of events resulting from any of the above. (Example, exsanguination from rupture of the uterus.)

Indirect Maternal Death

Death of the mother not directly related to obstetric causes but resulting from previously existing disease, or a disease that developed during pregnancy, labour or puerperium, but which was aggravated by the maternal physiological adaptation to pregnancy. (Example, mitral stenosis.)

Non-Obstetrical Death

Death of the mother resulting from accidental or incidental causes in no way related to pregnancy. (Example, death from an airplane crash.)

Maternal Mortality Rate

The number of maternal deaths that occur as a result of the reproductive process per 100 000 live births.

It should be noted that the above definitions of maternal mortality adapted from Williams Obstetrics do not specify a gestational time period. It is suggested that for use in this definition the time from conception to 42 days postpartum be accepted.

Recommendation #27, The Task Force recommends that the foregoing definitions of uniform terminology for maternal and perinatal statistics

be adopted for use throughout Canada. It is further recommended that these definitions be forwarded to the appropriate federal and provincial authorities for further discussion with a view to their implementation.

V. FUTURE OF THE TASK FORCE ON HIGH RISK PREGNANCY

As discussed in the general Introduction, the Report of the Canadian Commission for the International Year of the Child recommended that governments "adopt a policy making maternal and child health a priority for the next five years". The Task Force on High Risk Pregnancy has welcomed this opportunity to have input into aspects of management of the prenatal period, attention to which will result in improved outcome for mothers and babies. Knowledge and attitudes to perinatal care are changing rapidly and the Task Force considers it important that the momentum for improved care attained through its establishment not be lost. The Task Force therefore recommends that an ad hoc committee on prenatal and perinatal care be established in association with the committee set up to follow-up on the recommendations of the Canadian Commission for the International Year of the Child.

Recommendation #28. An ad hoc committee of experts on prenatal and perinatal care be established and be charged with follow-up of the Report of the Canadian Commission for the International Year of the Child and this Task Force Report for the specific purpose of ensuring that Canadians attain optimal outcome of pregnancy as previously defined.

APPENDIX 1

REFERENCES

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REFERENCES

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APPENDIX 2

TASK FORCE MEMBERS AND CONSULTANTS

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TASK FORCE MEMBERS AND CONSULTANTS

MEMBERS

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APPENDIX 3

REPORT OF SUBCOMMITTEE ON THE PRENATAL RECORD

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REPORT OF SUBCOMMITTEE ON THE PRENATAL RECORD

CONTENTS

1. Philosophy and Functions of Prenatal Record
2. Content of Prenatal Record
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   - 2.3 Risk Factors
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1. Analysis of Provincial Prenatal Records and Their Functions

The recording and documentation of obstetric information has, over the years evolved into the collection of a relatively uniform data base contained in a prenatal record. This prenatal record is used in pregnancy as a single, complete and comprehensive summary of the several factors which might directly, or indirectly, influence the outcome of the pregnancy. At each visit the physician can quickly refresh his/her memory and evaluate any changes from previously recorded baselines. It also forms a record which can be transferred with a woman or used on the labour floor so that management at this time is appropriate to antecedent events. On reviewing the examples of the prenatal forms from eight provinces that were available to the Committee, these functions appear to be recognized in principle by all provincial records.

All provinces provide a mechanism for the physician to retain the original prenatal sheet while still allowing at least one copy of this information to be received by the hospital or the patient.

All provincial prenatal sheets recognize the need for certain basic background information and in addition provide line-by-line space for each prenatal visit in the current pregnancy. The items of information that are recorded at each prenatal visit are almost uniform throughout the country and the number of visits that can be recorded on one prenatal sheet varies from 14 (5 provinces) to 19 (Newfoundland). Each prenatal form lists a number of items as "reminders" (some check-off items) so that the record when completed will contain a consistent minimum data base for each pregnant patient. On the whole, there is surprisingly little variation in the basic content of the different prenatal sheets (see pages 94-95). Information related to history and ongoing prenatal visits is already relatively "standardized" in most instances.

Again, while the design format and number of pages contained within the record differs from province to province, it is quite

evident that each prenatal sheet from each province is an attempt to provide the physician with a practical document that is primarily used for patient management. The "reminder" or menu system, with or without a checklist, makes history taking and recording quicker, assists in a review of material at each subsequent woman's visit, and to some extent overcomes some of the problems of illegibility if more than one physician is involved in the woman's care. The predominent intent seems to be a functional record for use in patient management. None of the provincial forms appear to be specifically designed for the subsequent collection and storage of collective data or for computerization.

The principle of recognizing certain factors that may increase the risk of a poor maternal or fetal outcome for the current pregnancy, and of listing these as an aid to the attending physician, seems to have been established by at least seven of the eight provinces. Here, however, there is less uniformity. Some provinces use a broad grading or classification system in which there are differences in the choice of risk factors within each category. Others use a scoring system for risk identification and these numerical scoring systems differ between provinces.

In summary, it is apparent that all provincial prenatal forms have certain features in common. The standardization of the prenatal record as it has evolved in each province seems to be an attempt to assist the physician in the following:

1. Assure a complete basic record necessary for the proper management of the pregnant woman.

2. Reduce the amount of time taken to obtain this record.

3. To provide a means for the attending physician to review "at a glance" baseline data and information from previous prenatal visits which might influence subsequent management.

4. To provide some assistance to clinical judgment by indicating risk factors that allegedly influence outcome.

5. To provide a means of continuity for the recording of antecedent events that might influence management when the woman enters a labour unit or when the responsibility for patient care is transferred to another physician.

2. Content of Prenatal Forms

These functional recording systems are an attempt to meet the needs of both family physicians and specialists. It is important to recognize that compromises are necessary to achieve the needs of both groups. The proportion of deliveries carried out by family physicians varies from province to province but it is estimated that at least 50% of all deliveries in the country are still performed by this group. Therefore, in considering the function of a prenatal record, it is obvious that the needs of family physicians must be taken into consideration. Despite distinctive differences in referral patterns of obstetric practice between provinces and despite the need to serve both specialist and family physician there is in fact a fair degree of uniformity of content in all the prenatal forms. With minor adaptations each provincial prenatal form could contain the same basic information since differences that are currently existing are of a minor nature. An attempt at uniformity of content for specific high-risk factors may be a more contentious issue.

2.1 Factors considered basic or essential and common to most prenatal sheets

Method of patient identification
Identification of attending physician
Age, date of birth of patient
Parity
L.N.M.P.
E.D.C.
Menstrual cycle

Contraception/date discontinued

Genetic amniocentesis

Bleeding since L.N.M.P.

Past obstetric history

stillbirth, neonatal death, prematurity, abortion, number of living children

Previous confinements

dates, birthweight, gender, gestation, type of delivery, pregnancy/labour complications, neonatal complications

Past medical history

renal, cardiac, infertility, infections, diabetes, epilepsy, urinary tract infections, allergies, previous blood transfusions and operative procedures

Family history

diabetes, twins, congenital malformations, hereditary deafness, T.B., hypertension

Present history

hyperemesis, febrile illnesses, current medications, alcohol and drug use, smoking

Investigations

Hb, Rh, serology, Rubella, cytology, blood sugars, pregnancy tests and mid-stream urine for culture

Initial examination

pre-pregnancy weight, height, current weight, complete examination and pelvic examination, uterine size compared to gestation

Repeat examinations or subsequent visits

dates, gestation, weight, urine analysis, blood pressure, fundal height, presentation, fetal heart rate, remarks or comments, time of next visit

Risk Identification

This process forms a component of most of the prenatal forms that were reviewed. By common usage therefore it seems that

some form of risk identification process should be included as an essential component of the prenatal form. This is particularly the case if one of the purposes of the record is to assist family physicians; a list of risk factors may serve as a reminder for the particular patient under review.

2.2 Optional features for prenatal forms

These features may be of assistance to the attending physician but tend to be a matter of personal inclination. In addition, these items are not likely to significantly affect patient management. There is not a great deal of evidence that their documentation significantly affects the outcome of pregnancy. Some prenatal forms include space and reminders that summarize completed investigations. For example - Rh Gamma Globulin, ultrasound, G.T.T., medications, 28 weeks referral plan, consultation, etc.

Growth-curve charts are another feature as an aid to diagnosis of "large-for-dates" or "small-for-dates".

Documentation (optional)

Occupation of patient
Religion of patient
Ethnic origin of patient
Name of father
Occupation of father
Religion of father
Nutritional history
Hospital
Type of anesthesia requested
Labour requests
Father delivery
Rooming-in
Early discharge
Circumcision
Pediatrician

Discussion Topics (optional)

These appear to be a reminder of topics that could profitably be discussed with the patient; whether the majority of physicians have sufficient time to carry out an in-depth discussion of these topics may be another matter.

Weight gain
Smoking
Alcohol
Breast feeding
Prenatal classes
Work plans
Exercise
Coitus

2.3 Risk Factors

The validity of currently-used predictors of unfavourable outcome and the basis upon which these outcomes are identified is the topic of review by another sub-committee. The suggestion at this stage, in this document, is that some form of risk identification be retained either as an essential or optional feature of a prenatal record since most provinces have already taken this route. Provided they are used as an aid to clinical judgment, their inclusion probably serves a useful purpose particularly for practitioners who do not have a heavy obstetric caseload.

The Committee during a discussion on risk markers decided that a number were sufficiently obvious that further research into their validity was not necessary. Presumably the following list, agreed to by the major Committee, could form a minimum list:

Low birthweight
Previous stillbirth or neonatal death

Medical disorders
Rh Isoimmunization
Gestational diabetes
Multiple pregnancy
Premature spontaneous rupture of membranes
Prematurity
Malpresentation

Many other risk factors are included in the various prenatal forms that have been distributed to all Committee members. The inclusion or exclusion of these other risk factors will presumably depend on the outcome of the deliberations of the sub-committee reviewing this topic.

3. Design of Prenatal Form

In contrast to the content of the prenatal forms which contain many common basic medical/obstetric fields, the design of each provincial prenatal form varies considerably.

One point on design that could probably be agreed upon is that at least one copy of any prenatal form should be available so that a duplicate could be retained as part of the patient's hospital record. Improvements in design of a prenatal form should have input from those persons most closely involved in its use. This design should facilitate the functions of the prenatal record that have already been discussed.

4. Data Collection

Since each provincial prenatal form contains almost the same basic information with respect to each pregnancy it is tempting to consider the collection of data from this source. This is particularly the case with respect to information that might be obtained about the ratio of risk pregnancies handled by hospitals, the precise gestation in pregnancy that specific risks might be identified and the determination of any geographic differences in the proportion of risk

pregnancies. The prevalence of rubella susceptibility, nutritional status, or number of prenatal visits might be other examples of useful information on a provincial or national basis. However, there are certain difficulties connected with the use of prenatal forms for accurate data collection.

These are summarized below:

1. Compliance in the use of a specific form

   Any attempt at data retrieval must capture nearly all of the obstetric population. This is impossible unless all physicians in a province use a standardized prenatal form.

2. Compliance for completion

   A survey of over 2000 prenatal records by a Task Force of the Social Planning Council in Manitoba showed a wide range of variation on an item-per-item basis as far as completion rates were concerned. Some items had a completion rate of greater than 80%, others less than 50%. Obviously data collection with this type of variation will produce inaccuracies if there are a number of missing fields.

3. Accuracy of recorded data

   In all prenatal sheets there are a number of items that would contain "soft" information. For instance if accurate information was to be obtained on smoking it should include the type of cigarette, the amount of nicotine contained in this brand, the number of cigarettes smoked, the gestation during which smoking continued and when the patient stopped smoking during pregnancy, if this was the case. Similar examples can be found with respect to alcohol and drug use, etc.

4. Outcome data

   The interpretation of information from the prenatal sheet in

many instances requires knowledge of the final outcome of the pregnancy. This raises a number of difficulties with extracting material from hospital records, and again raises the question of accuracy with respect to Apgar scores and other measurements of outcome.

5. Analysis of data

The collection of information certainly implies its analysis and this raises the further question of which central agency would be the coordinator for the retrieval of this information; where would it be centralized and who would undertake any analysis?

For example, a nutritional history would certainly require more space and more specific questions than are currently present on any of the prenatal forms. The concept of data collection along these lines is more suggestive of a survey and would require more time than is realistically available to the practising physician.

It is extremely important, therefore, to clearly define the function of a prenatal record. Because a working document for the practising physician is incompatible with a document designed for accurate data collection, attempts at compromise to achieve both goals will almost certainly result in a document that does not satisfy either objective.

5. Summary and Conclusions

A review of the prenatal sheets in use across Canada shows that a common purpose is to function as a clinical document for the practising physician. Despite their apparent diversity all forms are fairly uniform in their content of basic obstetrical information and material. The inclusion of aids to assessing obstetric risk appears to have been accepted as a principle by almost all of the

provinces but there is very little uniformity with respect to the risk assessment systems in use. There is a wide diversity in design of most prenatal forms.

It would appear that general agreement could be reached upon the functions of a prenatal record and the inclusion of the necessary basic information that should be contained in a prenatal form as a minimum data base for patient management. The question of design will likely be much more difficult to resolve, particularly within the time constraints pending a final report of the Committee. The issue of using prenatal forms for data collection of a substantial nature is probably unrealistic although some agreement might be reached upon specific items of information, common to all forms, that might be collected on a provincial basis for comparison. The issue of risk assessment and the appropriate markers for such assessment is being reviewed by another sub-committee and the results of these deliberations could be incorporated into prenatal records if it was felt to be appropriate.

APPENDIX 4

LITERATURE REVIEW: FETAL HEART RATE MONITORING

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LITERATURE REVIEW: FETAL HEART RATE MONITORING

INTRA-PARTUM FETAL MONITORING

INTRODUCTION

Fetal heart tones have been accepted by clinicians as being important since the early 1800s. The use of auscultation and the recognition of fetal heart rate patterns were propounded by Kennedy in Dublin in a monograph published in 1833. In the latter half of the 19th century, Schwartz recommended that FHR be recorded during labour, both between and during contractions and suggested that fetal "asphyxia intoxication" modified fetal heart rate as did uterine contractions. Likewise, other physicians noted erratic patterns and the effect of drugs on these patterns about the same time. It is surprising, therefore, that these concepts largely disappeared until the 1950s when obstetricians again became interested in fetal heart patterns.

The few studies in the 1950s, using auscultation, suggested that the early definitions of fetal distress using fetal heart patterns were inadequate and poor predictors.

The use of electronic monitors has varied over previous decades, but recently has returned to prominence with improved equipment and the addition of fetal scalp sampling and other monitored variables. The prevailing philosophy in the 1980s appears to be that if bigger, better or more monitoring is done, it will be possible to identify all fetal distress and intervene in adequate time. How true is this?

Although several papers appeared in the late 1960s, it was not until the 1970s that real attention was paid to the evaluation of the usefulness of Fetal Heart Rate Patterns in the prediction of fetal distress. For this reason the literature has been reviewed from 1970 to the present day.

FORMAT OF LITERATURE REVIEW

Based on the same criteria used in the Task Force on the Periodic Health Examination, we looked at:

1. The burden of suffering
2. The validity and acceptability of manoeuvre
3. The effectiveness of the resulting intervention.

Number 2 has been divided further into the question posed in the original preliminary summary on fetal monitoring presented to this Committee in June. These are:

1. What is the objective of the risk indicator?
2. How well does it meet the objectives?
3. Who identifies the marker?
4. What are the costs?
5. What are the benefits?
6. What psychological cost is there?

The papers have been reviewed in reverse chronological order and have been divided into categories according to the strength of the research design and the quality of the evidence.

Burden of Suffering

The most common outcome measure suggested was perinatal mortality. In 1978, in Ontario, this accounted for 14.6/1000 deliveries. Although this appears high compared to other industrial nations, it is not common enough to be useful in any single series of cases. Because of the small denominators, any estimate of perinatal mortality is necessarily precarious and, without a confidence interval, can have little meaning on its own.

The second most frequent outcome suggested was Apgar Score which is used as a substitute measure of 'fetal distress'. It is

difficult to obtain the true incidence of low Apgar Scores (<7) in a total population since none of the authors carried out a community survey and hospital audits reflect the referral bias. The average estimate seems to be about 15% but this is probably high due to these biases.

Question 1: *WHAT IS THE OBJECTIVE OF THE INDICATOR?*

For fetal heart rate monitoring, the objective is to speedily identify the fetus in *distress* so that steps can be taken to prevent intra-partum death or the birth of an asphyxiated fetus, destined to have problems particularly in the first week of life. The implied philosophy is that a *distressed* fetus will be at high risk of perinatal death or a neurologically poor outcome resulting in handicap.

(The word 'distress' appears in italics because there is frequent argument concerning the difference between 'stress' and 'distress' and those two terms should be distinguished.)

Question 2: *HOW WELL DOES THE INDICATOR REACH ITS OBJECTIVE?*

The bulk of the papers deal with this question. There are two aspects to this question. The first (a) is how good is the indicator at doing its task and for this it will be necessary to look at fetal monitoring as a diagnostic test and explore its properties, sensitivity, specificity and predictive values. The second aspect (b) is to judge whether, despite its strengths and weaknesses, fetal monitoring as a diagnostic test has proved useful enough to alter the outcomes of delivery.

Under ideal test conditions, there should be 100% accuracy and no false positives or negatives, when gauged against a gold standard.

The gold standard used in the majority of papers was a low Apgar Score (< 7) and occasionally perinatal death. Sometimes, Apgar Score was associated with scalp pH.

Randomized Clinical Trials

Because of the use of comparable groups, the four RCT's did not address the problem of accuracy but went directly to the 2nd aspect of outcomes.

Cohort

The cohort studies likewise looked at comparability of outcomes and not at test itself.

Descriptive (Case Series)

The following table summarizes the papers in chronologically reverse order:

		1' Apgar <7			
Review	n	+Predictive Value	-Predictive Value	Sensitivity	Specificity
1. Westgren et al.	5037	NC	NC	NC	NC
2. Phillips et al.	37	"	"	"	"
3. Liu et al.	50	"	"	"	"
4. Goodlin et al.	1100	"	"	"	"
5. Nochimson et al.	?	"	"	"	"
6. Amato	3076	"	"	"	"
7. Lee et al.	?	"	"	"	"
8. Saldana	620	23.0	86.2	70.6	43.7
9. Chik et al.	61	22.6	79.3	87.5	47.8
10. Tejani et al.	200	27.4	91.4	74.3	58.2
11. Tutela et al.	608	NC	NC	NC	NC
12. Edington et al.	911	"	"	"	"
13. Shenker et al.	760	39.0	77.8	53.4	66.2
	413	16.4	90.4	38.3	67.5
	1566	15.4	90.2	44.8	74.7
14. Thomas	946	NC	NC	NC	NC
15. Sturbois		68.4	91.4	76.5	87.6
	131	51.3	84.8	58.8	80.4
		52.8	84.2	55.9	82.5
16. Gabert et al.	396	NC	NC	NC	NC
17. Kelly et al.	150	"	"	"	"
18. Gabert et al.	749	66.2	91.4	84.3	79.5
19. Shenker	1000	24.5	89.7	68.4	56.6
20. Schifrin et al.	307	42.9	93.0	53.9	89.6
21. Paul	1798	NC	NC	NC	NC
22. Paul et al.	245	"	"	"	"

Why is there such a difference in predictions? The main contribution to the variable predictive rates is the bias of referral. It is impossible to find details of the population except that, for the most part, the papers are dealing with high risk patients by their own criteria. The one exception is that of Westgren (#1) which looks at low risk and Amato (#6) who looks at a community hospital.

The worrisome aspect of these results is that, with one or two exceptions only, most of the authors were optimistic and enthusiastic proponents of monitoring despite positive predictive values dropping as low as 15%. The logical extension of these results is even more worrisome. Since the papers with low predictive values all studied high risk patient populations with a high prevalence of poor outcomes, things can only get worse if a 'normal' population is monitored since a lower prevalence will lead to more false positives being identified.

On the other hand, the high negative predictive values which were universally achieved are reassuring. This indicates that if the FHR tracings are normal then one can state with confidence that a normal fetus will result.

A summary of the methodological guidelines for a diagnostic test and the papers' approximation to those may provide a better appreciation of the problems. (See table on page 96).

Biases: Gold Standard

Apgar as a gold standard (best available estimate at the moment) may not be the best measure of fetal distress. Perinatal mortality is susceptible to small sample estimates.

Patient Sample Includes Spectrum of Disease

Most of the populations were 'high risk' (according to a variety of criteria) or low risk but only one is a community based hospital. As a result, the features of the test cannot be generalized.

Diagnostic Test

RCTs	Gold Standard	Patient Sample	Study Setting/Referral	Precision/Variation	Normal Defined	Technique Described	Utility of Test	Properties Discussed	Percentage Monitored
Haverkamp	X		X	X	X	X			
Kelso	X		X		X	X			
Renon	X		X						
Haverkamp	X		X		X	X			
COHORT									
Krebs	X	X			X	X	X	X	
Paul	X		X						
DESCRIPTIVE									
Westgren	X		X						
Phillips	X				X				
Liu	X				X				
Goodlin	X		X		X				
Nochimson	X				X	X			
Amato	X	X							
Lee	X		X		X				
Chik	X				X	X			
Tejani	X					X			
Tutela	X					X			
Edington	X		X		X				
Shenker	X				X	X			
Thomas	X				X				
Sturbois	X				X	X	X	X	
Gabert	X								
Kelly	X								
Gabert	X	X				X	X		
Shenker	X								
Shifrin	X				X	X	X	X	
Paul	X					X			

Study Sample/Referral Pattern

Not only does the referral pattern affect the outcome, it also contributes to an 'apparently' more accurate test if only high risk patients are included or a poor test if only low risk is considered. The second point is the percentage of total patients included. In many papers it is a small, perhaps carefully selected group of patients.

Precision/Variability

Only one paper discusses observer agreement and that is the clinical trial of Haverkamp. In any large series, if there exists intra- and inter-observer variability, it could under- or overestimate the value of the test.

Normal Defined

If normal/abnormal is not defined, it is impossible to assess the usefulness of the results.

Technique of Test

The same comment can be made for describing the test. Some of the papers carried a lot of detail which was helpful, others just 'monitored'.

Utility of Test

This was poorly documented. The bias resulting from its absence can be in the direction of overemphasizing the usefulness and raising false hopes in the interpretor of the results.

Properties

It was surprising that the obvious proponents of monitoring were blithely unaware of what their results were showing. Most did not discuss the problems of false positives and false negatives or discussed these as irrelevant. The bias of interpretation is strong.

Question 3: *WHO IDENTIFIES THE MARKER?*

The majority of papers make the point that personnel are trained both for the hooking up of the monitor and also the reading of the tracings. One paper goes as far as to point out that their unit has a fetal intensive care unit where a 'monitoring team' does all the intra-partum monitoring and this they consider essential.

How well are the tracings read? Haverkamp's second trial reports a 90% agreement between observer, but this is not borne out in a paper devoted to assessing tracings, written by Trimbos and Kierse. In their study, 100 tracings were presented twice to five readers in a random fashion and five components were assessed: Basal heart rate; oscillation amplitude and frequency; accelerations and decelerations and a sixth pooled index where 0, 1, 2 were assigned to each of the five components giving scores ranging from zero to 10. The following results were obtained:

Agreement	Basal HR		Oscillating Amplitude		Oscillating Frequency		Accel.		Decel.		Fischer's Score	
All 5	96	96	40	37	47	47	34	69	65	71	47	64
1 and 4	1	2	35	42	38	20	29	22	16	15	25	25
2 and 3	2	2	24	20	12	16	25	7	13	8	27	9
3,1,1, or 2,2,1	-	-	1	1	3	-	12	2	6	6	1	2

The accelerations were so variable that it had to be redefined in terms of amplitude and duration. Seven to 13% of the results were thought to warrant immediate intervention and then changed to normal on the second occasion.

The paper concludes that the interpretation of cardiotocogram (CTGS) is not as easy or reproducible as one might wish.

Question 4: *WHAT ARE THE COSTS?*

Banta and Thatcher, in their paper on the assessment of costs and benefits of electronic fetal monitoring, have estimated both direct and indirect costs and both are stated to be conservative. The direct cost of fetal monitoring looks at equipment services; neonatal and maternal morbidity due to monitoring as one component and direct and indirect cost of Cesarean section. It is difficult to judge how appropriate the costs are but they are estimated to run around $411 million per year in the U.S.

Other papers have not tried to estimate monetary cost but have tabulated the amount of equipment which would be required for 100% monitoring. The estimates of a monitor to patient rates range from 1/300 - 1/500 patients.

The medical costs are better documented. The four randomized clinical trials reported increased c/s rates, with those of Haverkamp putting the rate as double that of an ausculated group.

The descriptive papers show variable Cesarean rates. Most suggest that it stays about the same, others claim a reduction and one or two show an increase. Unfortunately, without proper controls, it is hard to estimate.

Other medical costs to the mother can include lacerations of the mother or placenta and uterine perforation although these are rarely reported. Fetal costs include scalp lacerations; hemorrhage occurring in 0.3% cases and scalp abscesses. If amniotomy is done, a prolapsed cord is possible. More severe sequelae can occur, but are rare.

Cesarean sections can have risks for the fetus lung, but estimates of the extent of this are scanty.

Question 5: *WHAT ARE THE BENEFITS?*

The best evidence comes from the clinical trials because the patients had an equal chance of being ausculated or monitored. Of the four trials, three reported no benefit, but the fourth trial was stopped because it was felt that monitoring had proved to be superior. Unfortunately, the fourth trial had done frequent analysis of the data without an '*a priori*' set of stopping rules.

The cohort studies, like the descriptive studies reported an improvement in neonatal and perinatal mortality. Most also reported similar or fewer low Apgar scores. Lack of truly comparable groups make these claims impossible to assess.

Question 6: *WHAT ARE THE PSYCHOLOGICAL COSTS TO MOTHER?*

Some women reported anxiety and discomfort with the insertion of the electrodes, but often found the monitoring reassuring. One paper, by Starkman, enumerates the feelings of 35 women who had been monitored. Those who had had a previous fetal loss were positive about the benefits; those of low risk and no previous loss were predominantly negative.

SUMMARY

What conclusions can we come to in the light of the conflicting evidence? What follows is a series of quotes from the papers which have been evaluated, followed by a list of the recommendations from the NICHD Consensus Development Task Force Report: Predictors of Intrapartum Fetal Distress - The Role of Electronic Fetal Monitoring.

Quotes:

Paul (1974): 'To evaluate fetal monitoring fully, a well designed obstetric study combined with comprehensive infant growth and development studies is necessary.'

Kelso (1976): 'No beneficial or deleterious effects of continuous Fetal Heart Rate shown.'

Renou (1976): 'Highly trained staff necessary.'

Westgren (1980): 'Fetal Heart Rate Pattern irreproachable in less than 50% of tracings. Can mislead clinicians into unnecessary procedures.' (He advocates FHR monitoring but sees it as a screening device rather than a diagnostic test.)

Goodlin (1977): 'Prolapsed cord and abruptio placenta diagnosed not by FHR but by nursing care.'

Amato (1977): 'Although differences seen, they are usually in the lower birthweights. Once over 2500 grams, the differences disappear.' (This may be one explanation why the clinical trials of Haverkamp showed no differences - he did not monitor less than 34 weeks GAs.)

Lee (1976): 'Fetal monitoring can predict a good outcome but seems to overestimate problems.'

Tutera (1975): 'Technical difficulties and complications can occur.'

Edington (1975): '20% of bad outcomes cannot be predicted by FHR.' (This point also made by Paul in one of his papers where he explored the physiological and biological reasons why intrapartum monitoring could fail - uterine contractions unpredictable, cord position, etc.)

Shenker (1975): 'Statistically, the method of delivery is almost as accurate a predictor of low APGAR scores at one minute as monitoring record.'

Thomas (1975): 'Late decelerations are frequently temporary and not serious.' Monitoring is good screening, not a diagnostic device.

NICHD Consensus Development Task Force

Recommendations for current clinical practice:

1. The electronic fetal monitor or any other technology should never be a substitute for clinical judgment. Electronic fetal monitoring is only one method of fetal assessment.

2. Proper use of both intermittent auscultation and continuous electronic fetal monitoring in both high- and low-risk patients should, at the outset, include a discussion with the patient of her wishes, concerns and questions concerning benefits, limitations, and risks of fetal monitoring. Women should have the opportunity to discuss the use of all forms of monitoring during the course of prenatal care, and again upon admission to the labour suite.

3. Periodic auscultation of the fetal heart rate is an acceptable method of assessment of fetal condition for women at low risk of intrapartum fetal distress. Interpretation of auscultated fetal heart rate data should include an understanding of the relationship of FHR changes to uterine contractions. Although the Task Force finds no evidence that electronic fetal monitoring reduces morbidity and mortality in low-risk patients, it recognizes that, under certain circumstances, mothers or physicians may choose to use electronic fetal monitoring even in low-risk situations.

4. The use of electronic fetal monitoring should be strongly considered in high-risk patients. Some of the high risk situations may include: (a) low birth weight, prematurity, postmaturity, and IUGR; (b) medical complications of pregnancy; (c) meconium staining of the amniotic fluid; (d) intrapartum obstetrical complications; (e) use of oxytocin in labour; and (f) the presence of abnormal auscultatory findings.

   The medical record should reflect careful consideration of the benefits and risks to each patient, including a discussion of the indications for electronic fetal monitoring with the patient.

5. Since unexpected risk factors may arise during labour in patients without prior evidence of risk, all hospitals and birthing centres providing maternity care should have the necessary trained staff and equipment to assess carefully the status of each fetus in labour and to take appropriate action.

6. In order that electronic fetal monitoring be used appropriately, the medical profession and others should encourage, through their various educational modalities a thorough understanding of the principles and procedures of intrapartum FHR assessment by personnel responsible for the care of pregnant women. Special attention should be given to benefits, limitations and risks.

7. The use of fetal scalp blood pH determination is strongly encouraged as an adjunct to electronic FHR monitoring.

8. Attention to the known potential hazards of electronic fetal monitoring should accompany its use. Placement of the fetal scalp electrode and intrauterine pressure catheter should be performed with attention to aseptic and atraumatic technique. Prolonged supine position of the mother should be avoided, and maternal mobility should not be unnecessarily limited.

9. Hospital personnel should be cognizant of the potential impact of electronic fetal monitoring upon family centered childbirth. Family-centered care and indicated intrapartum electronic fetal monitoring are not mutually exclusive. Maternity services should be encouraged to integrate concepts of family-centered care with care of women who are electronically monitored.

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APPENDIX 5

PROVINCIAL PRENATAL RECORD FORMS

PRENATAL RECORD — PART I

BRITISH COLUMBIA

HOSPITAL

1. NAME | RACIAL ORIGIN

ADDRESS | TELEPHONE NUMBER

MOTHER'S AGE | DATE OF BIRTH | OCCUPATION | MARITAL STATUS | DOCTOR'S NAME

FATHER'S NAME | RACIAL ORIGIN

FATHER'S AGE | FATHER'S OCCUPATION | M.S.P. NUMBER | DOCTOR'S PHONE NUMBER

2. OBSTETRICAL HISTORY INCLUDING ABORTIONS

DATE	PLACE OF CONFINEMENT OR ABORTION	DUR. PREG.	HOURS OF LABOUR	TYPE OF DELIVERY	COMPLICATIONS MOTHER AND/OR INFANT	CHILD: SEX	CHILD: BIRTH WEIGHT	CHILD: PRESENT HEALTH

3. RISK ASSESSMENT

Reproductive History

- ☐ Age - less than 15, greater than 35
- ☐ Parity 5+
- ☐ Weight - less than 45 kg (< 100), greater than 90 kg (> 200 lbs.)
- ☐ Habitual Abortion
- ☐ Stillbirth/Neonatal Death
- ☐ Fetal Anomalies
- ☐ Labour Premature
- ☐ Labour Prolonged
- ☐ Labour precipitous (< 3 hours)
- ☐ Difficult Delivery
- ☐ Post p. Hemorrhage, Manual Removal
- ☐ Preeclampsia/Hypertension

Associated Hi Risk Conditions

- ☐ Uterine Surgery or Malformations C-section, Cone Biopsy, Cervical Suture, etc.
- ☐ Chronic Renal Disease
- ☐ Diabetes (incl. Gest.)
- ☐ Cardiac Disease & Hypertension
- ☐ Serious Medical, Surgical or Psychiatric Disorders

4. HISTORY OF PRESENT PREGNANCY (Specify)

NO		YES	
☐	BLEEDING (Date)	☐	
☐	PYREXIA (Date)	☐	
☐	RADIATION (Date)	☐	
☐	NAUSEA	☐	
☐	SMOKING (Query pattern of usage)	☐	
☐	ALCOHOL, DRUGS (Query pattern of usage)	☐	
☐	OCCUPATIONAL	☐	

NUTRITION (24 hour recall) GOOD ☐ FAIR ☐ POOR ☐

5. PAST ILLNESS (Specify)

NO		YES	
☐	RENAL	☐	
☐	CARDIAC	☐	
☐	INFECTIONS	☐	
☐	RUBELLA	☐	
☐	VENEREAL	☐	
☐	ALLERGIES	☐	
☐	OPERATIONS	☐	
☐	TRANSFUSIONS	☐	
☐	OTHERS	☐	

6. FAMILY HISTORY (Specify)

NO		YES	
☐	DIABETES	☐	
☐	CARDIAC	☐	
☐	HYPERTENSION	☐	
☐	TUBERCULOSIS	☐	
☐	TWINS	☐	
☐	MALFORMATIONS	☐	
☐	OTHERS	☐	

10. EXAMINATION

DATE | GENERAL CONDITION

B.P. mm Hg

HEAD & NECK

BREAST & LYMPH NODES

HEART & LUNGS

ABDOMEN

SPINE

VARICES & SKIN

PELVIS NORMAL, ABNORMAL (Describe)

CERVIX CYTOLOGY (Class No.)

OTHER OBSERVATIONS

SIGNATURE MD

7. MENSTRUAL HISTORY

L.M.P. (Date)

E.D.C.

IF UNSURE, CONSIDER EARLY ULTRASOUND

MENSTRUAL CYCLE

8. METHOD OF CONTRACEPTION

(Specify)

DATE OF DISCONTINUANCE

9. CURRENT MEDICATIONS

11. TOPICS FOR DISCUSSION AND ADVICE

Alternate Physician(s)	Bowels
Genetic Counselling	Baths
Prenatal Course & Classes	Clothes
	Books
Nutrition	Breast Care
Supplements	Breast Feeding
Wt. Control	Baby Care
Exercise	Labour Stages
Hosp. Adm. Procedures	Rest
Arrival at Hospital	Smoking
Anaes. & Analg.	Alcohol
Coitus	Medications

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Q.P. 30472/1 Vancouver, B.C.

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YELLOW COPY - INFANT'S CHART
PINK COPY - PHYSICIAN'S

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PRENATAL RECORD — PART II

HOSPITAL

12. LABORATORY

Blood Group	Haemoglobin: Initial / 36-38 Weeks	A.R.T. Test
Rubella HI Titre	Hepatitis Carrier? / Rh Factor	Rh Antibody Titre: Dates / Results

DOCTOR'S NAME

13. RISK FACTORS TO BE ANTICIPATED (PART 1)

	NO	YES	
PREGNANCY	☐	☐	
DELIVERY	☐	☐	
NEWBORN	☐	☐	

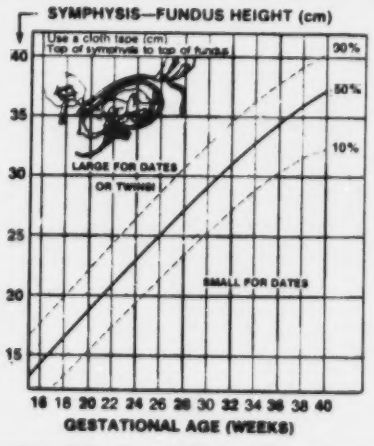
Risk Factors in Present Pregnancy ?

- ☐ Uncertain Dates (after 20 weeks)
- ☐ Poor Weight Gain / Weight Loss
- ☐ Bleeding
- ☐ Anemia < 10 gm %
- ☐ Suspected IUGR
- ☐ Multiple Pregnancy
- ☐ Hydramnios
- ☐ Malpresentation (>34 weeks)
- ☐ Isoimmunization
- ☐ Hypertension
- ☐ Prolonged Pregnancy (>42 weeks)
- ☐ Pruritus
- ☐ Premature Rupture Membranes

AGE	GRAV	PARA	ABORTIONS	LIVING CHILDREN	L.M.P.	EDC	DATE OF QUICKENING

DATE	WT	B.P.	URINE	GEST. AGE IN WEEKS	HT. OF FUNDUS CMS.	F.H. & ACTIVITY	PRESENT & POSITION	RISK ASSESSMENT (Low, Med., High)	MEDICATION REMARKS	RETURN IN

NOTE: SEND HOSPITAL COPIES AT 37 WEEKS



14. PHYSICIAN TO CARE FOR INFANT:

15. SPECIAL INVESTIGATIONS (ULTRA SOUND LABORATORY ETC.) OTHER COMMENTS

PHYSICIAN IN CHARGE OF PATIENT

M.D.

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LABOUR SUMMARY AND DELIVERY RECORD — PART 1

1 GRAV | PARA | ABORTIONS SPONTANEOUS ☐ ELECTIVE ☐

LMP | CYCLE | QUICKENING

EDC SURE ☐ UNSURE ☐ | GESTATION

BLOOD GP | LAST TITRE DATE | LAST HgB DATE | RUBELLA TITRE

2 PREGNANCY SINGLE ☐ TWINS ☐ TRIPLETS ☐ OTHER ☐ SPECIFY

In Multiple Pregnancy specify baby A, B, C, etc. (Use separate form for each baby) ☐

3 ADMISSION TO LABOUR/ DELIVERY AREA Time ____ ____ Date _____ In True Labour ☐ Other ☐ Specify In Suspected Labour ☐ For Induction ☐ For Elective C. Section ☐

4 HIGH RISK FACTORS BEFORE LABOUR

SCORES (if applicable) – Present Pregnancy – Obstetrical History – Gestational Age TOTAL SCORE

LIST:– _____

5 CONSULTATION OBSTETRIC: NONE ☐ BEFORE LABOUR ☐ DURING LABOUR ☐ AFTER LABOUR ☐ TIME CALLED (Hour) ____ PEDIATRIC: NONE ☐ BEFORE LABOUR ☐ DURING LABOUR ☐ AT DELIVERY ☐ TIME CALLED (Hour) ____

6 INDUCTION OR AUGMENTATION OF LABOUR INDUCTION No ☐ Yes ☐ AUGMENTATION No ☐ Yes ☐

METHOD OF INDUCTION OR AUGMENTATION ARM Only ☐ Oxytocin Only ☐ ARM and Oxytocin ☐ Other ☐ Specify _____

RIPENING INFUSIONS No ☐ Yes ☐

INDICATIONS FOR INDUCTION OR AUGMENTATION ☐ _____

7 FETAL MONITORING – FETAL HEART

Auscultation or other means	No	Yes	Norm	Abnorm
On Admission				
1st Stage				
2nd Stage				

FETAL BLOOD FBS No ☐ Yes ☐ No. of Times ____ Lowest pH ____ Cord Blood Gases No ☐ Yes ☐ If Yes, UApH ____

ELECTRONIC MONITORING (Excluding Doppler) Continuous ☐ Intermittent ☐ TIME FROM ____ TO ____

	No	Yes	Ext	Int
FHR				
UP				

8 TIME SUMMARY

	Hour	Day	Month	Year
1st Stage Started				
2nd Stage Started				
Baby Delivered				
Placenta Delivered				
Membranes Ruptured				

	Hours	Minutes
1st Stage		
2nd Stage		
3rd Stage		

Meconium No ☐ Yes ☐

Duration of Ruptured Membranes: Days ____ Hours ____ Minutes ____

9 BABY Unit Number ____ Admission No. ____

RECORD APGAR SCORE ON REVERSE OF WHITE COPY SEX – Male ☐ Female ☐ Ambiguous ☐ Liveborn ☐ Stillborn ☐

WEIGHT ____ GMS GESTATIONAL AGE ____ WEEKS

CONGENITAL MALFORMATIONS No ☐ Yes ☐ Specify _____

10 UMBILICAL CORD: PROLAPSE ☐ OCCULT ☐ TRUE KNOT ☐ LOOPS OF CORD No ☐ Yes ☐ VESSELS 2 3

SPECIFY NUMBER AND SITE OF LOOPS _____

PLACENTA – Normal ☐ Abnormal ☐ Specify _____

WEIGHT ____ GMS TO PATHOLOGY ☐ CULTURES ☐ OTHER ☐ _____

CORD BLOOD – VD ☐ RH STUDIES ☐ RESERVE ☐ OTHER ☐ _____

DOCTORS PRESENT AT DELIVERY _____

NURSES PRESENT AT DELIVERY _____

SIGNATURE OF ATTENDING NURSE _____ DATE _____

WHITE COPY—MOTHER'S CHART YELLOW COPY—INFANT'S CHART PINK COPY—PHYSICIAN'S COPY

LABOUR SUMMARY AND DELIVERY RECORD — PART 2

11 INDICATIONS FOR OPERATIVE DELIVERY (Enter in Section 15)

- 2nd Stage Delay — Primigravida ≥ 1 hour; — Multigravida ≥ ½ hour
- Fetal Distress — Abnormal FHR; — Meconium; — Acidosis
- Cord Prolapse or Presentation
- Poor Maternal Effort
- Arrest in 2nd Stage — Transverse; — POP
- Failed Trial of Forceps
- Disproportion
- Excessive Fetal Size
- Prolonged Labour
- Incoord Uterine Action
- Cervical Dystocia
- Malpresentation — Breech; — Face/Brow; — Shoulder, etc.
- Unstable Lie
- IUGR
- APH — Abruptio; — Plac Praevia; — Undiag Haem.
- Cardiac Disease
- Pre-Eclampsia/Eclampsia
- Hypertension
- Diabetes
- Renal Disease
- Immunization — Rh, etc.
- Multiple Pregnancy
- Elderly Primigravida
- Congenital Malforms.
- Known Fetal Anomaly
- Prev. Uterine Surgery — C Section (Repeat); — Myomectomy; — Hysterotomy
- Prev. Surgery of Lower Genital Tract
- Infections (Herpes, Chorioamnionitis, etc.)
- Other

THIS RECORD FOR BABY ____ (A, B, C etc)

12 ANALGESIA DURING LABOUR

NARCOTIC No ☐ Yes ☐

Epidural Catheter ☐ Nitrous Oxide ☐

Other ☐ Specify _____

MEDICATION	IV/IM	DOSE	TIME	DATE

13 ANAESTHESIA DURING DELIVERY Nitrous Oxide ☐ General Anaesthetic ☐ Spinal ☐ Epidural ☐ Pudendal ☐ Local Perineal ☐

Other ☐ Specify

14 HIGH RISK FACTORS DURING LABOUR AND DELIVERY

- Meconium ☐
- FHR Abnormal 1st Stage ☐
- FHR Abnormal 2nd Stage ☐
- Cord Complications ☐
- Intrapartum Hypertension ☐
- Intrapartum Eclampsia ☐
- Intrapartum Haemorrhage ☐
- Intrapartum Infection ☐
- Multiple Pregnancy ☐
- Malpresentation ☐
- Prolonged ROM ☐
- Prolonged Labour ☐
- Feto Pelvic Disproportion ☐
- Prolonged 2nd Stage ☐
- Fetal pH < 7.25 ☐
- UApH < 7.20 ☐
- Other ☐ _____
- None ☐

15 DELIVERY

PRESENTATION AND POSITION — During Labour _____ At Delivery _____

Type — Spontaneous Vaginal ☐ — Ventouse Extraction ☐ — Shoulder Dystocia ☐

Forceps — Low ☐ — Low Mid ☐ — Mid ☐ — High ☐

Traction Mild to Mod ☐ — Traction Mod to Severe ☐

Trial Successful ☐ — Trial Failed ☐

Rotation — Manual & Spontaneous Delivery ☐ — Forceps Rotation & Spontaneous Delivery ☐

Manual & Forceps Delivery ☐ — Forceps Rotation & Forceps Delivery ☐

Breech — Easy ☐ — Moderately Difficult ☐ — Difficult ☐

Internal Version ☐ — Breech Extraction ☐ — Forceps to after coming head ☐

Caesarean Section — Pfannenstiel Incision ☐ — Vertical Midline Incision ☐ — Paramedian Incision ☐ — Tubal ligation ☐

Low Segment Transverse Incision ☐ — Low Segment Vertical Incision ☐ — Classical ☐ — Inverted-T ☐

OTHER TYPE OF DELIVERY ☐ Specify _____

MANUAL REMOVAL OF PLACENTA No ☐ Yes ☐

INDICATIONS FOR OPERATIVE DELIVERY (To be completed for all Forceps, Rotations, Breech Extractions, Ventouse & Caesarean Sect's.)

List in Order of Priority

1. _____
2. _____
3. _____
4. _____

16 BLOOD LOSS Minimal ☐ Moderate ☐ Excessive ☐

ESTIMATED ☐☐☐☐ CC's OR MEASURED ☐☐☐☐ CC's

PERINEUM Intact ☐ — Tear 1 2 3 4 (DEGREE : Definitions on Reverse)

EPISIOTOMY None ☐ — Midline ☐ — Medio-lateral ☐

Extended into Vagina ☐ — Extended in Rectum ☐

Additional Lacerations (Labial, Vaginal, Cervical, etc.) No ☐ Yes ☐

If YES specify _____ Sutured By _____

Suture Pack left in No ☐ Yes ☐ Catherized No ☐ Yes ☐ Catheter left in: No ☐ Yes ☐

Additional Comments and Operative Findings: _____

SIGNATURE OF ATTENDING PHYSICIAN _____ DATE _____

PERINATAL PROGRAMME OF B.C.

NEWBORN RECORD - PART 1

1. HOSPITAL OF BIRTH: | CASE NO. | D.O.C. | FATHERS NAME | RACIAL ORIGIN | MOTHERS MAIDEN NAME | UNIT NUMBER | RACIAL ORIGIN

2. **FETAL RISK ASSESSMENT:** SCORES
NO PRENATAL RECORD ☐ PRENATAL RISK: None ☐ Yes ☐ _____
NO LABOUR/DELIVERY RECORD ☐ LABOUR/DELIVERY RISK: None ☐ Yes ☐ _____

3. **MATERNAL HISTORY SUMMARY:** AGE | BLOOD GP. | RH POS. | RH NEG.
Number of previous pregnancies _____
LIVE BIRTHS: Term _____ Pre-term _____ STILLBIRTHS: Term _____ Pre-term _____ ABORTIONS: Therapeutic _____ Spontaneous _____ NO. OF CHILDREN Living _____ At Home _____
COMMENTS: _____

4. **DELIVERY:** DURATION MEMBRANE RUPTURE ____ Hrs. MECONIUM STAINING: No ☐ Yes ☐ Method of Delivery _____
DATE OF BIRTH _____ Time _____ Hrs. SEX ____ CORD BLOOD SPECIMEN: VDS ☐ Rh ☐ Reserve ☐
COMMENTS: _____

5. **APGAR SCORE**

	0	1	2	1 Min.	5 Min.	10 Min.
Heart Rate	Absent	Under 100	Above 100			
Resp. Effort	Absent	Slow Irregular	Good Crying			
Muscle Tone	Limp	Some flex of Extrem.	Active Motion			
Reflex Irritability	None	Grimace	Crying			
Colour	Blue Pale	Blue Extrem.	All Pink			
TOTAL						

6. **RESUSCITATION:**
No ☐ Yes ☐ By Whom:
Method: Age (min) Duration (min)
☐ O_2 Flow _____ _____
☐ O_2 Mask & Pressure _____ _____
☐ O_2 Endotracheal Tube _____ _____
☐ Other _____
Comments: _____

7. **EYE PROPHYLAXIS:**
A_gNO_3 ☐ Other ☐ _____
Specify: _____
Signature: _____

8. **INFANT IDENTIFIED BY:**
_____

9. **DELIVERY ROOM ASSESSMENT:**
Colour: ☐ Pink ☐ Plethoric ☐ Central Cyanosis ☐ Pale **Skin:** ☐ Vernix ☐ Desquamation ☐ Meconium ☐ Edema ☐ Petechiae
Activity: ☐ Active ☐ Lethargic **Tone:** ☐ Good ☐ Fair ☐ Limp/Floppy **CVS:** Apex Left ☐ Yes ☐ No
Respiratory System: ☐ Normal ☐ Grunting ☐ Retraction ☐ Shallow Respirations ☐ Poor Air Entry ☐ Gasping
Heart Sounds: ☐ Normal ☐ Abnormal **Umbilical Cord:** ☐ Normal ☐ Thick ☐ Thin ☐ Meconium Stained **Vessels:** ☐ 2 ☐ 3
Abdomen: ☐ Normal ☐ Scaphoid ☐ Masses _____
Genitalia: ☐ Female ☐ Male ☐ Ambiguous **Anus:** ☐ Patent ☐ Imperforate
Birth Trauma: ☐ No ☐ Yes _____
Congenital Anomalies: ☐ No ☐ Yes _____
Immediately before Transfer to Nursery: IN O_2: ☐ No ☐ Yes Axillary Temp. ____ °C Resp. Rate _____ Heart Rate _____ Voided: ☐ Yes ☐ No
Passed Meconium: ☐ Yes ☐ No EXAMINER'S SIGNATURE: _____

10. **TRANSFER TO:**
Transitional Nursery ☐ Regular Nursery ☐ Intensive Care Nursery ☐ Other ☐
Time of Admission to Nursery: _____ Hours Date: _____

11. **EVALUATION OF DEVELOPMENT:** (Growth Curves on Reverse)
Birthweight _____ (Gms) _____ % ILE
Length _____ (Cms) _____ % ILE
Head Circ. _____ (Cms) _____ % ILE

THIS INFANT CLASSIFIED AS:
Small for Gestational Age SGA ☐
Appropriate for Gestational Age AGA ☐
Large for Gestational Age LGA ☐

GESTATION AGE:
By Dates _____ Wks. By Exam _____ Wks.
Method _____

Pre Term (< 37 Completed Weeks – i.e. < 259 Days) ☐
Term (37 to < 42 Completed Weeks – 254 to 293 Days) ☐
Post Term (42 Completed Weeks or More – 294 Days or More) ☐

WHITE COPY—INFANT'S CHART YELLOW COPY—MOTHER'S CHART PINK COPY—PHYSICIAN'S COPY

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NEWBORN RECORD - PART 2

12. PROCEDURES:

SKIN CARE: No ☐ Yes ☐ _____

CORD CARE: No ☐ Yes ☐ _____

VIT. K: ☐

13. THIS INFANT TRANSFERRED TO ANOTHER HOSPITAL:

No ☐ Yes ☐ SPECIFY _____

14. PHYSICAL EXAMINATION: A. Admission B. Discharge

A. Date: _____ B. Date: _____ Axillary Temp. _____ °C Resp. Rate _____ /min. Apex Rate _____ /min.

A	B						
☐	☐	1 Appearance	☐	☐	7 Reflexes	☐	☐	13 Skin
☐	☐	2 Abdomen	☐	☐	8 Eyes	☐	☐	14 Genitals
☐	☐	3 Femoral Pulses	☐	☐	9 E.N.T.	☐	☐	15 Anus
☐	☐	4 Heart	☐	☐	10 Head/Neck	☐	☐	16 Trunk/Spine
☐	☐	5 Lungs	☐	☐	11 Extremities	☐	☐	17 Cry
☐	☐	6 Tone	☐	☐	12 Hips	☐	☐	18 Cong. Anom.

COMMENTS: *(Use Ref. No's.)* _____

(CODE: ☑ = Normal ○ = Abnormality Present *(Describe)*) *Signature: A.* _____ */B.* _____

15. PROBLEM LIST:

Date Commenced	PROBLEM	Resolved at Time of Discharge Yes/No/Unknown

16. ANY FURTHER PERTINENT INFORMATION:

17. POSSIBLE FOLLOW-UP PROBLEMS:

(CODE: ☐ = Problem Present *(describe)*)

COMMENTS: *(Use Ref. No.)* _____

A. Socio-Economic
- 1 ☐ Drug Habituation
- 2 ☐ Language Problem
- 3 ☐ Malnutrition
- Home Situation:
- 4 ☐ Single Parent
- 5 ☐ Working Mother
- 6 ☐ Poverty
- 7 ☐ Other Socio-Economic

B. Emotional
- 8 ☐ Maternal Rejection
- 9 ☐ Paternal Rejection
- 10 ☐ Prolonged Maternal/ Infant Separation
- 11 ☐ Maternal Immaturity
- 12 ☐ Maternal Anxiety State
- 13 ☐ Maternal Psychosis
- 14 ☐ Post Partum Depression
- 15 ☐ Other Emotional

C. Infant
- 16 ☐ Unresolved Medical Problem
- 17 ☐ Potential Medical Problem
- 18 ☐ Other Infant Problem

D. Sibling with Chronic Medical Problem
- 19 ☐ "SIDS"
- 20 ☐ Other Chronic Medical Problem

18. FURTHER PROCEDURES: *(See also Section 12)*

METABOLIC SCREENING TESTS: No ☐ Yes ☐ Specify _____ CORD VDS TEST: Neg. ☐ Pos. ☐ URINALYSIS: Neg. ☐ Pos. ☐

CIRCUMCISION: No ☐ Yes ☐ Date: _____ Method: _____

19. CONSULTATIONS: With:

1. _____
2. _____

20. NEONATAL DEATH: ☐

Date: _____ Time: _____ Hrs.

AUTOPSY: Planned ☐ Requested ☐ Refused ☐

Comments: _____

21. CONDITION ON DISCHARGE:

DISCHARGED ALIVE ☐ Date: _____ Weight _____ GMS

FINAL DIAGNOSIS: _____

DISCHARGED WITH: Mother ☐ Other ☐

Referral to Public Health Nurse: _____

Referral to Dept. of Human Resources: _____

Breast Fed ☐ OR Specify Formula: _____

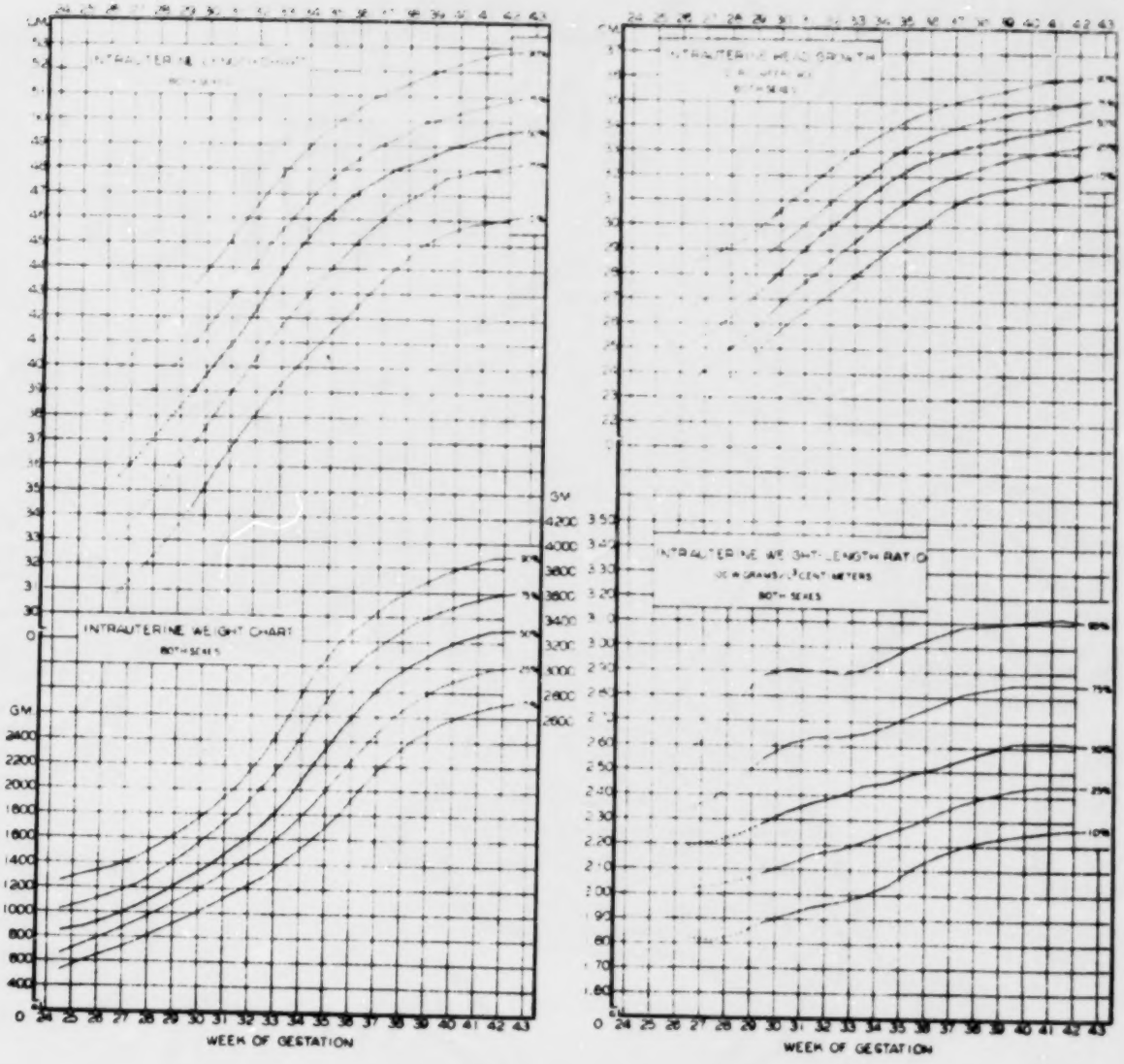
Vitamins ☐ Fluoride ☐ Iron ☐ DISCHARGE MEDICATIONS: *(Specify & state Dose)* _____

22. DISCHARGED TO THE CARE OF: _____

ATTENDING PHYSICIAN: _____ M.D.

PERINATAL PROGRAMME OF B.C.

INTRAUTERINE GROWTH CHART



LUBCHENCO, L. O., HANSMAN, C. and BOYD, E. Pediatrics, 37 403, 1966

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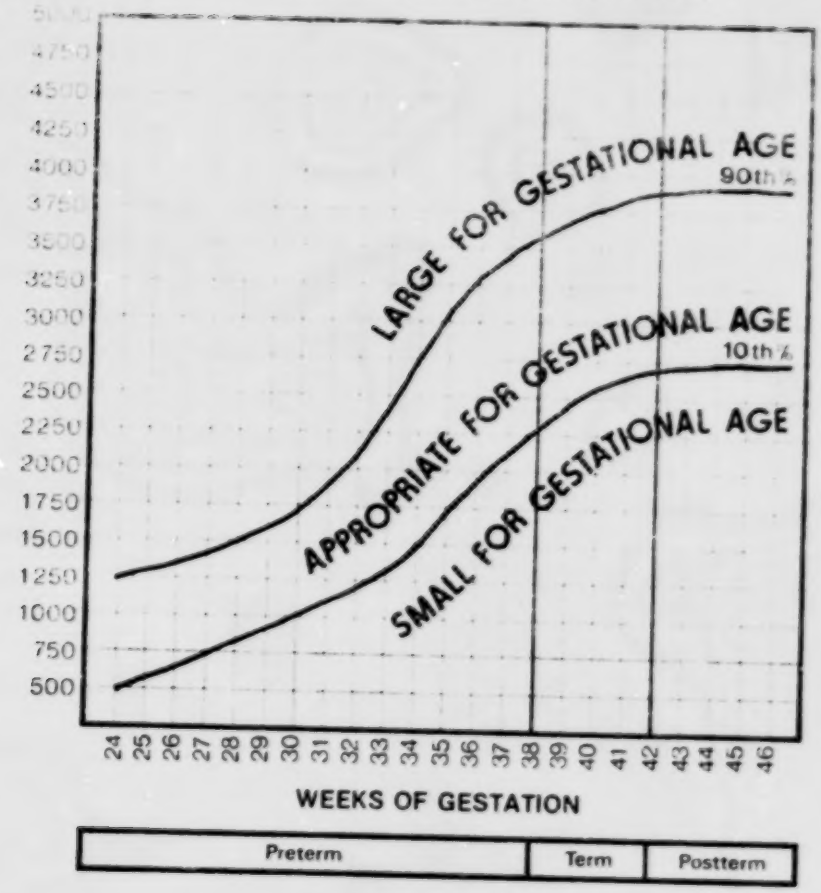
CLASSIFICATION OF NEWBORNS
BY BIRTHWEIGHT AND GESTATIONAL AGE



BATTAGLIA F.C., LUBCHENCO L.O. Pediatrics, 71:161, 1967

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ALBERTA

ALBERTA PRENATAL RECORD

This record is prepared and revised by the Perinatal Committee of the Alberta Medical Association, printed by the Department of Hospitals and Medical Care and distributed to the hospitals to be available to their doctors.

2 DOCTOR'S COPY
3 HOSPITAL COPY: MOTHER'S CHART
4 HOSPITAL COPY: NEWBORN CHART

A GUIDE TO PREGNANCY RISK

PREGNANCY AT HIGH RISK (10 times the average risk)

Pregnancies which are so complicated that the fetus and/or mother are obviously in danger. If at all possible, these patients should be transferred to a regional perinatal center for intensive care and delivery. Clearly, there are patients who deserve to be placed in this risk category who cannot be transferred safely or in time to benefit the fetus or mother.

Small for dates
Antepartum bleeding > 20 weeks
Twins (large for dates)
Polyhydramnios (Single fetus)
Insulin diabetes
Immaturity (31 weeks or less, > 20 weeks)

PREGNANCY AT RISK

The fetus and/or mother are definitely at risk and consultation should be obtained with a specialist obstetrician in your area. In addition, consultation with an appropriate internist may be necessary. These patients may be managed by continuing collaborative care and deliveries in an obstetrical unit with intermediate level nursing facilities OR they may be returned to the care of the referring physician with a suggested plan of management for the remainder of the pregnancy.

Gestational diabetes
Uncertain dates
Rh. sensitization
Smoking, alcohol, drugs
Rubella
Fever/amnionitis
Abnormal presentation
> 42 weeks (postmaturity)
Preclampsia B.P. > 140/90, proteinuria
Prolonged rupture of membranes
Incompetent cervix
Chronic maternal conditions
(hypertension, heart, renal)

PREGNANCY AT LEAST RISK

Certain dates
No significant medical disease
No significant genetic history
No past pregnancy complications
No previous I.U.G.R. or perinatal mortality

SOME SUGGESTIONS AND INVESTIGATIONS

- Telephone consultation
- Sonar
- Symphysial fundal measurement
- Uninary estriols
- Fetal biophysical profile
- Fetal movement graphs
- Glucose Tolerance Test
- Non stress tests
- Fetal stress tests
- Rh. negative checks at 28, 32, 36 weeks
- X-ray
- Nitrazine speculum examination
- Cultures
- ?
- ?
- ?

PART I

PRENATAL RECORD

DOCTOR'S NAME

NAME

MAIDEN NAME — M | S / W | D

ADDRESS

DATE OF FIRST VISIT | TELEPHONE NUMBER

DATE OF BIRTH MOTHER	AGE	OCCUPATION	RELIGION	FATHER OF CHILD	DATE OF BIRTH FATHER	AGE	OCCUPATION	RELIGION

ESTIMATION OF GESTATIONAL AGE — L.M.P. — SURE ☐ NOT SURE ☐

MENSTRUAL HISTORY — CYCLE — DURATION

BIRTH CONTROL (SPECIFY) — DATE DISCONTINUED

BLEEDING SINCE L.N.M.P.

NO ☐ YES ☐ SPECIFY

IN WEEKS — UTERINE SIZE AT FIRST VISIT — EXPECTED / ACTUAL

INVESTIGATIONS TO CONFIRM DATES

E.D.C.

Topics for Discussion and Advice

Family Obs. History

Genetic Counsell:

Prenatal Course and Classes

Nutrition (Vegetarian)

Supplements

Weight Control

Exercise

Smoking

Alcohol

Medications

Rest

Coitus

Bowels

Baths

Clothes

Books

OBSTETRICAL HISTORY (INCLUDING ABORTIONS)

DATE	PLACE	DURATION PREG.	DURATION LAB	METH. DEL.	*MATERNAL COMPLICATIONS PREG./IN LAB./POST P.	NEONATAL COMPLIC.	SEX	WEIGHT	PRES. HEALTH

*N.B. POTENTIALLY RECURRENT COMPLICATIONS SUCH AS A.P.H., P.P.H., HYPERTENSION, SMALL FOR DATES, LARGE FOR DATES, AND CESAREAN SECTION. WHEN IN DOUBT WRITE TO PREVIOUS HOSPITAL.

PRESENT PREGNANCY

	NO	YES
EXCESS VOMITING	☐	■
ALCOHOL	☐	■
SMOKING	☐	■
DRUG ABUSE	☐	■

CURRENT MEDICATIONS

SPECIFY

FAMILY HISTORY IF YES, SPECIFY

	NO	YES
DIABETES	☐	■
TWINS	☐	■
MALFORMATIONS	☐	■
HEREDITARY DISEASE	☐	■
OTHER	☐	■

SPECIFY

PAST MEDICAL HISTORY IF YES, SPECIFY

	NO	YES
RENAL	☐	■
CARDIAC	☐	■
INFECTIONS	☐	■
INFERTILITY	☐	■
ALLERGIES	☐	■
OPERATIONS	☐	■
TRANSFUSIONS	☐	■
OTHER	☐	■

SPECIFY

EXAMINATION: DATE

GENERAL CONDITION

HEAD & NECK

BREASTS

HEART

LUNGS

ABDOMEN

EXTREMITIES

BIMANUAL VAGINAL

SPECULUM

SPECIFY

DOCTOR'S COPY

000121

PRENATAL RECORD

NAME

AGE | GRAV | PARA

INITIAL INVESTIGATIONS

HEIGHT	PRE PREG. WEIGHT	ABO	Rh	Hgb	SEROLOGY	RUBELLA TITRE	PAPP SMEAR		DATE OF QUICKENING	L N M P	E D C

DATE	WGT.	URINE PRO / SUG	B.P.	GEST. AGE	FHR/M (cm)	PRES.	F.H.	REMARKS, MEDICATIONS, ETC.	NEXT VISIT

Topics for Discussion and Advice

Hosp. Adm. Procedures

Arrival at Hospital

Anaes. & Analg.

Labor Stages

Breast Care

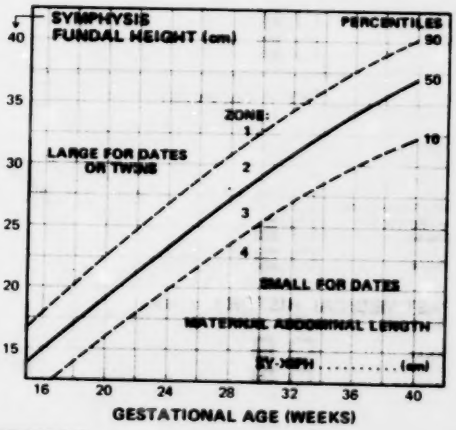
Breast Feed:

Baby Care

RISK FACTORS

HIGH RISK INVESTIGATIONS

DATE					



NOTATIONS FOR DELIVERY/PUERPERIUM

PRENATAL CLASSES ☐

BREAST FEEDING ☐

BABY'S DOCTOR _____

DOCTOR'S SIGNATURE _____

TO TEAR OUT CARBON PAPER BEFORE WRITING ON ANY OF THE FORMS. PLEASE PRESS HARD.

SIDE ONE

PRENATAL FORM

HOSPITAL NO

HOSPITAL

CASE NO

DOCTOR

NAME

M S

MAIDEN NAME W D

ADDRESS

TELEPHONE NUMBER	A.H.C.I.C. NUMBER	SOCIAL INSURANCE NO	DATE OF BIRTH	AGE	OCCUPATION	RELIGION
FATHER OF CHILD		SOCIAL INSURANCE NO	DATE OF BIRTH	AGE	OCCUPATION	RELIGION

OBSTETRICAL HISTORY INCLUDING ABORTIONS

DATE	PLACE OF CONFINEMENT	DUR OF PREG IN WEEKS	HOURS OF LABOUR	TYPE OF DELIVERY	COMPLICATIONS	CHILD SEX	CHILD BIRTH WT	CHILD PRESENT HEALTH

MENSTRUAL HISTORY MENARCHE / DURATION / CYCLE / L.M.P. SURE ☐ NOT SURE ☐ E.D.C.

BIRTH CONTROL (SPECIFY) NONE ☐

DATE OF DISCONTINUANCE

HISTORY OF PRESENT PREGNANCY NAUSEA BREASTS BLEEDING OTHER

EXAMINATION DATE

GENERAL CONDITION

HEAD AND NECK

LYMPH NODES

HEART

LUNGS

BREASTS

ABDOMEN

SPINE

VARICES

BIMANUAL PELVIC EXAM.

SPECULUM INSPECTION

RECTAL

PAP SMEAR

FAMILY HISTORY

DIABETES

CARDIAC

HYPERTENSION

TUBERCULOSIS

TWINS

MALFORMATIONS

PERSONAL HISTORY

PAST ILLNESS

RENAL

CARDIAC

INFECTIONS

RUBELLA

VENEREAL

ALLERGIES

OPERATIONS

TRANSFUSIONS

1. HOSPITAL COPY: MOTHER'S CHART—White
2. HOSPITAL COPY: NEWBORN CHART—Pink
3. DOCTOR'S COPY—Yellow

FROM:
UNIVERSITY OF ALBERTA, EDMONTON, ALTA

000123

NAME

AGE	GRAV	PARA	L M P	E D C	DATE OF QUICKENING

BLOOD			PREVIOUS Rh GLOBULIN	FATHER OF CHILD Rh GENOTYPE	RUBELLA ANTIBODY PRESENT ☐ NOT DETECTABLE ☐	OTHER INVESTIGATIONS (Rh Titre, etc.)	DATE		
STS	ABO GROUP	Rh				FINDINGS			

HEIGHT	PRE PREG WEIGHT	CYTOLOGY
CHEST X-RAY		

RISK FACTORS - TO BE ANTICIPATED IN THIS PREGNANCY DELIVERY NEWBORN

DATE	DUR OF PREG IN WEEKS	FUNDUS IN WEEKS	WT	EDEMA (SITE)	URINE ALB	URINE SUG	B.P.	Hb	PRESENT AND POSITION	F H RATE	ENGAGEMENT	MEDICATIONS, REMARKS	RETURN ON

If albumen is present, it is assumed that catheter or midstream specimen has been tested

CLINICAL ASSESSMENT OF PELVIS	X-RAY REPORTS DATE

PRENATAL CLASSES	ANESTHESIA PREFERRED	PEDIATRICIAN	BREAST FEEDING

SIGNED _____ M.D.

ALBERTA PRENATAL RECORD - Instructions

About fifty percent of perinatal deaths occur before the patient is admitted to hospital and it is likely that morbidity from premature birth and inadequate fetal growth can be reduced by more vigilant prenatal care.

This record has been prepared with the assistance of a widely representative group of physicians in Alberta in order to bring the recent advances in perinatal care into routine use througout the Province and it is also hoped that the revised record will produce better carbon copies.

The two primary emphases at the first prenatal visit should be:

1. ESTABLISHMENT OF E.D.C. — To determine whether the patient is pregnant and, if so, by how many weeks. For this reason the data establishing the E.D.C. are listed first on the record and an attempt is made to arrange the pertinent information on the form in such a way that there is a logical sequence of thought and examination from the stated L.M.N.P. in the top left hand corner of this section to the final estimation of this important date in the bottom right hand corner of this section.

   Menstrual Cycle
   - Cycle length prior to L.M.P. (greater than 30 days) refers to menstrual pattern within three months of L.M.P.

   Birth Control
   - Oral contraceptives discontinued with one or two cycles before L.M.P.
   - I.U.C.D. in situ may result in abortion or premature labor but may be removed during pregnancy. Prompt referral is desirable.

   Bleeding
   - Bleeding since L.M.P. refers to vaginal bleeding in early pregnancy. This can be associated with a molar pregnancy which, if suspected, would suggest estimation of urinary HCG and sonar examination.

   Uncertain Dates
   - Uncertain dates or lack of correlation between the period of gestation and the actual size of the uterus can lead to problems later in the pregnancy. Pelvic examination should include bi-manual palpation of the uterus.

   Investigations to Confirm Dates
   - Where dates are uncertain every effort should be made to establish gestational age accurately by sonar examination before the twentieth week of pregnancy (or uterine height of 20 cm.)
   - The dates and results of pregnancy tests should be listed in this space.
   - The Perinatal Committee has tried to avoid listing tests and investigations on this record in case this should be construed to mean that the tests were essential in all patients for good care.

2. ASSESSMENT OF PATIENT'S HISTORIES AND GENERAL HEALTH TO FORECAST THE OUTCOME OF THIS PREGNANCY — There is little change in this section of the prenatal record from the traditional approach to this assessment.

   Obstetric History
   - Only the most common recurrent complications are listed on the record but emphasis is placed on writing to the hospital for the case history if there is any doubt about previous adverse obstetric history or illness of the newborn.

   Present Pregnancy
   - The physiological changes in early pregnancy (nausea, breast changes, urinary frequency, etc.) have been omitted in this section but excessive vomiting requiring treatment should be noted and also smoking, alcohol and the use of non-medical drugs (eg. caffeine) as these lifestyles are known to affect the fetus adversely and are of importance in the care of the newborn. Every effort should be made to encourage the pregnant patient to change these three lifestyles because of the risk to the fetus.

   Current Medications
   - Any current prescription medication (steroids, insulin, tranquilizers) should be listed.

   Family History
   - This section has been shortened because a rather general question will usually illicit the pertinent information if the physician suspects there is history of which he should be aware. A history of seizures in the family or birth-damaged siblings, premature births, etc., would encourage a more detailed history.

   Past Medical History
   - This is not a complete list for the sake of brevity. For example, tuberculosis, veneral disease, and herpes, come collectively under "infections" but should be specified individually.

Physical Examination - The date of this examination should be specified even if it is the same as the date of first visit. Any abnormal findings or pelvic abnormalities should be listed.

Any risk factors identified on this first page should be noted in the RISK FACTOR section on the back of the form and, where necessary, the follow-up indicated e.g. "Dates uncertain" - Sonography (on such-and-such dates).

Repetition — The back page of the record (Part II) has the patient's name, age, gravida and parity repeated at the top of the page. The usual ages considered at risk are less than 18 years and over 38 years but this depends on multiple factors. The primigravida over 30 years can cause concern. The para 4+ can prove a high risk patient.

Age
Parity

Initial Investigations — The initial investigations are listed at the top of the back page so that they are visible at every visit. If the reports on any of these investigations show deviations from the normal, e.g. Rh. antibodies, the follow-up would be in the high-risk boxes at the bottom of the page where the dates of follow-up tests would be planned and arrangements made regarding the father's genotype.

The initial investigations should be repeated at every pregnancy.

Hgb. — The usual column for hemoglobin is omitted because the same recording procedure can be followed as for high risk deviations from the normal: a Hgb. of < 10g. would be checked off as a risk factor and listed in the high risk investigation boxes for treatment and further checks.

Height & Weight — Height and weight are listed together but while women under 5 feet (152 cm.) and under 100 lbs. in weight (45 kgm.) are considered to be at risk, there is still a relevancy in family size (e.g. some immigrants are small people). It is the regular weight gain and the growth of the fetus that will be pertinent in the pregnancy and the weight column is directly below the pre-pregnancy weight for the purpose of watching weight gain. Obese women are at risk.

Date — The first four columns are usually completed by the office nurse.

Urinalysis — If the patient does not bring a specimen, the specimen should be obtained because this check is essential especially in the presence of even a slight increase in blood pressure. More than a trace of proteinuria warrants hospitalization.

Glycosuria in pregnancy should always suggest the presence of gestational diabetes until proved otherwise. Gestational diabetes requires prompt consultation.

Blood Pressure — An increase in blood pressure (diastolic pressure increase of 20 mm. or a diastolic pressure of 90 mm.) requires careful assessment and possible hospitalization. Management of hypertension and/or edema in pregnancy with diuretic drugs on an ambulatory basis has now been proved ineffective because, while relieving the patient's symptoms, this treatment does not improve the basic placental dysfunction which can result in a small-for-dates or dead fetus.

Gestational Age — Once the E.D.C. has been established the weeks of gestation of the pregnancy by dates should be entered on this column.

Fundus (cms.) — Regardless of the gestational age by dates the height of the fundus should be carefully measured in centimetres at each prenatal visit, using a tape measure. The patient should lie flat with one pillow. The fundus is identified, without applying pressure to the abdomen, and the upper edge of the fundus is marked on the abdomen using a pen. The tape measure is then used to record the distance between the upper border of the symphysis pubis and the ink mark on the abdomen. This distance should be entered in the "Fundus" column.

Serial measurements of the size and rate of growth of the uterus are now considered so important in pregnancy that they warrant recording on the graph supplied in the bottom right hand corner of page two. This graph correlates weeks of gestation with the symphysis-fundal measurement. The expected recordings on this graph would be in zones 2 or 3. The dotted lines indicate the 10th and 90th percentiles and recordings above the 90th percentile at two successive visits would warrant a sonar scan (zone 1: twins, large infant, hydramnios, gestational age in doubt). On the other hand, if the uterus is small-for-dates (zone 4) or fails to increase in size between two visits there is a risk of feto-placental dysfunction and fetal growth retardation. This observation at two successive visits would warrant sonar examination and serial tests of feto-placental function after 28 weeks. Where there is inappropriate uterine growth for the gestational age (zone 1 or zone 4) there may also be less than normal fetal activity (less than ten movements during 12 hours on two successive days) and the patient should be asked to report this immediately.

Where utrauterine growth retardation is suspected serial sonar examination should be done (20, 26, 30, 34 and 38 weeks). The diameter of the fetal trunk should be estimated as well as the biparietal diameter as the ratio of this diameter to the fetal trunk diameter provides the most information in these cases.

The bottom right hand corner of the ultrasound chart requires the maternal abdominal length from the symphysis-pubis to the xiphoid. Women with short abdominal lengths (37 cm. or less) may have measurements recorded in the lower part of zone 3 or may even fall into zone 4 and give the appearance of being small-for-dates.

Presentation — This column is for use after 34 weeks in case of a malpresentation. The column on "Engagement" was not considered essential and has been omitted.

F.H.R. — This column is narrow and should only require a checkmark. Most doctors do not count the fetal heart beats in normal antenatal patients.

Topics for Discussion — These are marginal reminder notes: the prenatal suggestions on the front page and the labor and delivery factors on the back page.

HIGH RISK FACTORS (Fly sheet in front) — No attempt has been made to include complete lists because these lists are long and space-consuming. A longer check list could be supplied from the Perinatal office on request.

This half page with the risk factors on the back for constant reminder, may be used to conceal the name and maintain the confidentiality of records when they are in use during the prenatal period, or it may be detached if the doctor so wishes.

Saskatchewan Health

Hospital Services Plan

Prenatal Record

Health 19 42 5 79

Name	Age	Date of Birth
Address		Telephone No.
Father of Child		Date of First Visit
Family Physician	Obstetrician	Pediatrician

Obstetrical History Including Abortions:

Date	Place of Confinement	Dur. Preg. Wks	Hours of Labour	Type of Delivery	Complications Mother and/or Infant	Child Sex	Child Birth Wt	Child Pres. Health

Past illnesses:

	No	Yes	Specify
Renal	☐	☐	
Cardiac	☐	☐	
Infections	☐	☐	
Rubella	☐	☐	
Venereal	☐	☐	
Allergies	☐	☐	
Operations	☐	☐	
Transfusions	☐	☐	
Other	☐	☐	

Family history:

	No	Yes	Specify
Diabetes	☐	☐	
Cardiac	☐	☐	
Hypertension	☐	☐	
Tuberculosis	☐	☐	
Twins	☐	☐	
Malformations	☐	☐	
Mental Retardation	☐	☐	
Other	☐	☐	

Menstrual history:

Cycle _____ Duration _____

L.M.P. ____ Normal ☐ Abnormal ☐

Method of contraception:

Date of Discontinuance

Pre-Preg. Weight	Height

History of present pregnancy: Specify

Nausea, Vomiting	No ☐	Yes ☐	
Bleeding	No ☐	Yes ☐	Date:
Fever	No ☐	Yes ☐	Date:
Radiation	No ☐	Yes ☐	Date:
Smoking	No ☐	Yes ☐	Amount:
Drug Use	No ☐	Yes ☐	Identify:
Nutrition	Poor ☐	Good ☐	

Current medications

Examination Date _____

General Condition:

Head & Neck:

Lymph Nodes:

Heart:

Lungs:

Breasts:

Abdomen:

Spine:

Limbs:

Pelvic Examination:

[redacted]

Age 35 +	1 ☐	Rh iso - Immunized Mother	2 ☐
40 +	2 ☐	Pos. History of Erythroblastosis	3 ☐
Para 0	1 ☐		
6 +	2 ☐		
Interval less than 2 years	1 ☐		
Weight 200 lb. +	1 ☐		
Diabetes - Mild, Moderate	2 ☐		
Severe	3 ☐		
Chronic Renal Disease with Diminished Renal Function	1 ☐		
	3 ☐		
Pre-Existing Hypertension			
140 + /90 +	1 ☐		
160 + /110 +	2 ☐		

[redacted]

Previous Obstetrical History

Abortion	☐
Stillbirth	☐
Neonatal Death	☐
Surviving Premature Infant	☐
Antepartum Hemorrhage	☐
Toxemia	☐
Mid-Forceps Delivery	☐
Cesarian Section	☐
Major Congenital Anomaly	☐
Baby 10 lbs. +	☐
One Instance of Above	1 ☐
Two or More Instances of Above	2 ☐

Doctor's Chart

000128

Full Term Deliveries	Prematures	Abortions 500 grams or less	Live Births: Surviving 7 days	Live Births: Dying before 7 days	Grav	E.D.C.	Date of Quickening

V.D.R.L.	ABO Group	RH	Father of Child RH Genotype	Rubella Titre	Pap Smear	Notations for Delivery

Fetal Risk Scoring "B" Present Pregnancy (Maximum Score is 3)

e.g. Hydramnios 3

Bleeding, before 20 weeks	
Alone	1
With Pain	2
Bleeding, after 20 weeks	
Ceased	1
Continues	2
With Pain	3
With Hypotension	3
Spontaneous Premature Rupture of Membranes	1
Latent Period 24 hr +	2
Anemia 8 to 10 gms	1
Less than 8 gms	2
No Prenatal Care	2
1 to 3 Prenatal Visits	1
Toxemia Mild - Moderate	1
Severe	3
Hydramnios (Single Fetus)	3
Multiple Pregnancy	2
Abnormal Glucose Tolerance	1
Decreasing Insulin Requirement	3
Maternal Diabetic Acidosis	3
Maternal Pyrexia	1
Pyrexia + FHR Greater Than 160	2
RH Negative	
With Antibody Titre	2
With Amniotic Fluid Liley Zone III	3

C Gestational Age (At time of scoring)

28 Wks. or Under	4
29 - 32 Wks	3
33 - 35 Wks	2
36-37 Wks	1
38 - 41 Wks	0
42 Wks	1
43 Wks. or More	2

Other Investigations

Date	Type	Findings

Prenatal Classes Yes No

Father For Case Room Yes No

Fetal Risk Score (Maximum is 10)

A. Baseline Data [ ] + B + C = Total Score

Evaluation Summary
Score 0 to 2 Low Risk
Score 3 to 6 Moderate Risk
Score >6 High Risk

Date	Dur. of Preg. in Weeks	Fundus in Weeks	Present. & and Position	F.H. Rate	Engagement	B.P.	WT	Edema	Urine Alb.	Urine Sug.	H.B.	Risk Score	Medications and Remarks	Return On

PROVINCE OF MANITOBA

OBSTETRICAL RECORD

DATE

WARD

FULL NAME

YEAR OF BIRTH

HOSPITAL NUMBER

PHYSICIAN

NAME	ADDRESS	PHONE

DOCTOR	HOSPITAL	INSURANCE - M.H.S.C.

AGE | MENSES | PILL | L.M.P. | E.D.C.

☐ 37 YEARS OR GREATER - AMNIOCENTESIS ☐ DONE ☐ NOT DONE ☐ REFUSED

OBSTETRICAL **GRAV.** **PARA** **ALIVE**

ALIVE ☐
DEAD ☐

PREMATURE OR < 2500 gm. _____ STILLBIRTHS _____

YEAR	WT.	GEST.	COMPLICATIONS	POST PARTUM

PREV. C/S _____

HIGH RISK SCORE — 1ST VISIT — 36 WEEK AND/OR ON ADMISSION

ALLERGIES — DRUGS

FAMILY HX CONGENITAL DEAFNESS | TB | DIABETES | TWINS | HYPERTENSION | BLEEDING

GENETIC HX

MED. AND SURG. DIABETES | CONE BX | EPILEPSY | U.T.I.

PRESENT HX MEDICATION | INFECTION | INFERTILITY | SMOKING

ETHNIC GROUP

CAUCASIAN	
INDIAN-METIS	
ESKIMO	
OTHER	

PREV. TRANSFUSION YES ☐ NO ☐

Hgb

S.T.S

Rh.

LAB NO

IMMUNOGLOBULIN

ANTIBODIES

EXAMINATION DATE | WEIGHT | B.P. | HEIGHT

HEAD AND NECK	BREASTS	PELVIC
HEART	LUNGS	CERVIX
ABDOMEN	EXTREMITIES	CORPUS
		ADNEXA

OBSTETRICAL PELVIC ASSESSMENT

URINE	P	S	MICRO	C AND S	
CERVIX	PAP			C AND S	

BREVINDEX DATE

RUBELLA H.I.T

BLOOD SUGAR

DATE	WT.	BP	URINE P / S	WEEKS	FUNDUS	POSITION	FH	MED AND REMARKS	RETURN IN

LITHO IN CANADA

PRE-NATAL SCORING FORM **PRE-NATAL RECORD**

000130

PRENATAL SCORING FORM

1) Score each question as indicated 2) Total each category score at 1st visit 3) Repeat at 36 weeks 4) Repeat on admission 5) Record on P N sheet

I. REPRODUCTIVE HISTORY

AGE
- <16 = 1
- 16 - 35 = 0
- >35 = 2

PARITY
- 0 = 1
- 1 - 4 = 0
- 5 + = 2

PAST OB HISTORY

- HABITUAL ABORTION/ INFERTILITY = 1 ☐
- P P H /MANUAL REMOVAL = 1 ☐
- BABY >9 LBS (4082 gm) = 1 ☐
- BABY <5½ LBS (2500 gm) = 1 ☐
- P E T /HYPERTENSION = 1 ☐
- PREVIOUS CAESAREAN = 2 ☐
- STILLBIRTH OR NEONATAL DEATH = 3 ☐
- PROLONGED LABOUR OR DIFFICULT DELIVERY = 1 ☐

II. ASSOCIATED CONDITIONS

- PREVIOUS GYNAECOLOGICAL SURGERY = 1 ☐
- CHRONIC RENAL DISEASE = 2 ☐
- GESTATIONAL DIABETES = 1 ☐
- DIABETES MELLITUS = 3 ☐
- CARDIAC DISEASE = 3 ☐
- OTHER MEDICAL DISORDERS (Chronic bronchitis, Lupus, Etc.) SCORE ACCORDING TO SEVERITY (1 to 3) = ☐

III. PRESENT PREGNANCY

		1st VISIT	36 WEEKS	ON ADM
BLEEDING				
<20 WEEKS	= 1	☐	☐	☐
>20 WEEKS	= 3	☐	☐	☐
ANEMIA <10 gm %	= 1	☐	☐	☐
PROLONGED PREGNANCY (42 WEEKS)	= 1	☐	☐	☐
HYPERTENSION	= 2	☐	☐	☐
PREMATURE RUPTURE MEMBRANES	= 2	☐	☐	☐
POLYHDRAMNIOS	= 2	☐	☐	☐
SMALL FOR DATES	= 3	☐	☐	☐
MULTIPLE PREGNANCY	= 3	☐	☐	☐
BREECH MALPRESENTATION				
Rh ISOIMMUNIZATION	= 3	☐	☐	☐

CATEGORY SCORE _____ + CATEGORY SCORE _____ + CATEGORY SCORE _____

TOTAL RISK SCORE 1st VISIT = ☐ TOTAL AT 36 WEEKS = ☐ TOTAL ON ADMISSION TO HOSPITAL = ☐

(Record scores in box on prenatal sheet)

NOTE: LOW RISK = 0 - 2
HIGH RISK = 3 - 6
EXTREME RISK = 7>

COMMENTS

000121

NOTES

DELIVERY RECORD

TYPE OF LABOUR

INDUCTION

ANAESTHESIA

DATE OF BIRTH

HOUR OF BIRTH

PRES. POS.

BABY - SEX

COMPLICATIONS

SPONTANEOUS

WEIGHT

BLOOD LOSS

FORCEPS

L.S./S.S./V.E.S.

THIRD STAGE

EPISIOTOMY

NURSING

SIGNATURE & QUALIFICATIONS

POST PARTUM EXAMINATION

DATE

WEIGHT

B.P.

HAEMOGLOBIN

URINE

FAMILY PLANNING

LOCHIA

NURSES

NURSING

BREASTS

PELVIS

CERVIX

PERINEUM

CORPUS

000132

ONTARIO
ANTENATAL RECORD 1

HOSPITAL _____

PRESS HARD
THIS FORM IS IN TRIPLICATE

WHITE - INFANTS CHART

PINK - DOCTOR'S COPY

CANARY - MOTHER'S CHART FORWARD TO HOSPITAL

PATIENT'S NAME

ADDRESS

PHONE# HOME

DATE OF BIRTH | AGE | EDUC. LEVEL | MAR. STATUS

OCCUPATION | PHONE# WORK

FATHER'S NAME | AGE | OCC.

FAMILY PHYS DOCTOR	OBS. CARE	BABY CARE	INSURANCE OHIP#

LMP (date) | CERTAIN: YES NO | TYPE: | DURATION:

CYCLE | DURATION | LAST USED:

HISTORY OF PREGNANCY — YEAR

BLEEDING
VOMITING
PYREXIA
SMOKING (cigs/day)
ALCOHOL
RADIATION

GRAVIDA	TERM	PREM	AB.	LIVE	MULTI PREG

Dates
Size

No.	Year	Sex	Gest. Age (wks.)	Birth Wt. (Kg.)	Dur. of Labour	Place of Birth	Type of Delivery	COMMENTS: RE - Pregnancy, Perinatal Death, Abnormality, etc.

SIGNIFICANT MEDICAL HISTORY

	YEAR(S)	COMMENTS
KIDNEY DIS.		
HEART DIS.		
HYPERTENSION		
DIABETES		
INFECTIONS		
THYROID DIS.		
TRANSFUSIONS		
OPERATIONS		
OTHER		

FAMILY HISTORY

	YEAR(S)	COMMENTS
HYPERTENSION		
DIABETES		
HEART DIS.		
MULTIPLE BIRTH		
MALFORMATION		
GENETIC DIS.		
EARLY ONSET DEAFNESS		
OTHER		

ALLERGIES

NUTRITION ASSESSMENT — YEAR(S)

MILK PRODUCTS
BREADS & CEREALS
FRUITS & VEGETABLES
PROTEIN SOURCES

HEIGHT | PRE-PREGNANCY WEIGHT | PRESENT WEIGHT | B.P.

CHECK (✓) IF NORMAL

HEAD NECK THYROID	☐	VAGINA	☐
ENT.	☐	CERVIX	☐
TEETH	☐	UTERUS	☐
CHEST	☐	ADNEXA	☐
BREASTS	☐	EXTREMITIES	☐
HEART VASC. SYST.	☐	VARICOSITIES	☐
ABDOMEN	☐	NEUROLOGICAL	☐
VULVA	☐	CYTOLOGY	☐

PELVIC ARCHITECTURE

OTHER:

REMARKS (detail abnormal findings)

DISCUSSION TOPICS
SMOKING
ALCOHOL
DRUG USE
WORK PLANS
EXERCISE
CORTUS
PRENATAL CLASSES
DENTAL CARE

PHYSICIAN'S SIGNATURE

DATE THIS ATTENDANCE

000133

ONTARIO
ANTENATAL RECORD 2

PATIENT'S NAME

ADDRESS

DOCTORS

RISK FACTORS IDENTIFIED INITIAL LIST

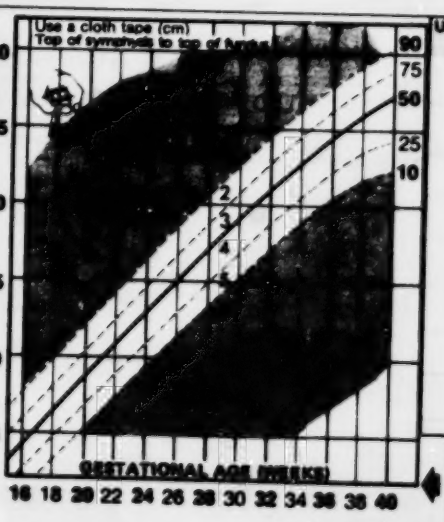
PRESS HARD
THIS FORM IS IN TRIPLICATE

WHITE - INFANT'S CHART
PINK - DOCTOR'S COPY
CANARY - MOTHER'S CHART

DATE	WT (lb./kg.)	G-AGE WK.	S-F HT	PRESN POSN.	FH	URINE PR	URINE GL.	URINE AC	BP	RISK GRADE	LAB	COMMENTS: (OTHER LAB, MEDICATIONS, ETC.)

ADDITIONAL COMMENTS:

Use a cloth tape (cm)
Top of symphysis to top of fundus



MEASURE SYMPHYSIS-FUNDUS HEIGHT AT EACH ANTENATAL VISIT AND RECORD ON GRAPH OPPOSITE.

ULTRASOUND AND ABNORMAL LABORATORY RESULTS

DIETICIAN

SOCIAL WORKER

NUTRITION
DIET
REST
TRAVEL
PREM. LABOUR
BREAST CARE
ANAES MED.
TYPE OF DELIVERY
FATHER AT DELIVERY
BREAST FEEDING
ROOM-IN
CIRCUMCISION
EARLY DISCHARGE
CAR SAFETY
OBSTETRICIAN
PAEDIATRICIAN

PHYSICIAN'S SIGNATURE

000134

POSTNATAL VISIT

DATE

WEEKS POSTPARTUM: _____

BREAST FEEDING: YES ☐ NO ☐ REASONS FOR DISCONTINUING: _____

_____

PHYSICAL EXAM

WT. _____ kg. B.P. _____ mmHg.

_____

_____

_____

_____

_____

EPISIOTOMY: _____ C. SECTION INCISION: _____

RUBELLA IMMUNE YES ☐ NO ☐ VACCINATED ☐ URINALYSIS: _____

PAP: _____ _____

_____

UNRESOLVED PROBLEMS: _____

_____

_____

ADVICE RE FUTURE PREGNANCIES (EG. CONTRACEPTION, RISK STATUS, REQUIREMENT FOR ULTRASOUND ETC.)

_____

_____

PHYSICIAN'S SIGNATURE _____

A GUIDE TO PREGNANCY RISK GRADING

At each antenatal visit please give your assessment of pregnancy (fetal plus maternal) risk according to the following grading system. The risk factors or problems listed below are intended *as examples only*. Additional space is provided for other risk producing problems which you have identified. This risk grading system is intended as a basis for planning the ongoing management of the pregnancy.

Pregnancy at no predictable risk

- ☐ NO PRIOR PERINATAL MORTALITY OR LOW BIRTHWEIGHT INFANT
- ☐ NO SIGNIFICANT MEDICAL DISEASE
- ☐ NO PREGNANCY COMPLICATIONS NOW OR IN THE PAST (Bleeding, Hypertension, Premature Labour)
- ☐ FETAL GROWTH SEEMS ADEQUATE

Pregnancy at risk

The fetus and/or mother may be at risk and consultation should be considered with a specialist obstetrician in your area. In addition, consultation with an appropriate internist may also be necessary. (These patients may be managed by continuing collaborative care and delivery in an obstetrical unit with intermediate level nursing facilities OR they may be returned to the care of the referring physician with a suggested plan of management for the remainder of the pregnancy).

- ☐ DIABETES, CLASS A (GESTATIONAL) OR CLASS B
- ☐ HYPERTENSION WITHOUT TOXAEMIA
- ☐ APH, CEASED AND IN HOSPITAL
- ☐ CERVICAL INCOMPETENCE
- ☐ HYDRAMNIOS
- ☐ POST - DATE PREGNANCY (42 weeks +)
- ☐ HISTORY OF PRIOR STILL BIRTH OR NEONATAL DEATH OR PREMATURE DELIVERY
- ☐ MATERNAL OBESITY (20% > IDEAL B.WT.)
- ☐ SIGNIFICANT TOBACCO, ALCOHOL, DRUG INTAKE
- ☐ RHESUS IMMUNIZATION
- ☐ PREMATURE RUPTURE OF MEMBRANES 34 WK. OR MORE
- ☐ OTHER SIGNIFICANT MEDICAL ILLNESS
- ☐ RENAL DISEASE WITHOUT HYPERTENSION
- ☐ MILD TOXAEMIA
- ☐ CONTROLLED PREMATURE LABOUR
- ☐ MULTIPLE PREGNANCY
- ☐ BREECH: BEYOND 36 WEEKS
- ☐ PRIMIGRAVIDA (age 35 +)
- ☐ HISTORY OF GENETIC DISEASE IN FAMILY (Genetic Amniocentesis or Counselling required)
- ☐ ANAEMIC NOT RESPONDING TO IRON (< 10gm)
- ☐ WEIGHT GAIN < 10 lbs. BY 30 WEEKS
- ☐ GRAND MULTIPARA (> 5)
- ☐ LARGE FOR DATES
- ☐ PREVIOUS UTERINE SURGERY INCLUDING CAESAREAN SECTION
- ☐ .....

Pregnancy at high risk

Pregnancies which are so complicated that the fetus and/or mother are obviously in danger. If at all possible, these patients should be transferred to a regional perinatal centre (level III) for intensive care and delivery. Clearly, there are patients who deserve to be placed in this risk category (with problems such as excessive antepartum bleeding , cord prolapse, or advanced uncontrolled premature labour) who cannot be transferred safely or in time to benefit the fetus or mother.

- ☐ DIABETES CLASS C, D, F, R OR SIGNIFICANTLY COMPLICATED
- ☐ RENAL DISEASE WITH HYPERTENSION ±↓FUNCTION
- ☐ PREMATURE RUPTURE OF MEMBRANES (± SEPSIS) *
- ☐ ANTEPARTUM BLEEDING, CONTINUING OR REPEATED *
- ☐ HYPERTENSION WITH SUPERIMPOSED TOXAEMIA
- ☐ EARLY UNCONTROLLED PREMATURE LABOUR *
- ☐ SEVERE FETAL GROWTH ARREST (< 10th Percentile)
- ☐ HEART DISEASE, ESPECIALLY WITH FAILURE
- ☐ .....
- ☐ .....
- ☐ .....
- ☐ .....

* 24 - 34 weeks gestational age.

Two or more minor risk problems can combine to produce a high pregnancy risk. Such a patient may deserve to be placed in a higher risk category.

DOSSIER PRÉNATAL No 1

APPUYEZ FERMEMENT. Formule en 3 exemplaires

HÔPITAL SOINS. OBS. SOINS BÉBÉ

MÉDECIN

NOM DE LA MALADE RELIGION

ADRESSE

DATE DE NAISSANCE J / M / A ÂGE TÉL.

PROFESSION ORIGINE ETHNIQUE ÉTAT CIVIL

NIVEAU D'INSTRUCTION OHIP NO.

NOM DU PÈRE DATE DE NAISSANCE ÂGE PROF. SITUATION FAMILIALE

Cycle D.M: Normale D.M (date)	Durée Anormale	Orale Durée (années) Stérilet	Arrêt (date)	Dates J / M / A Dimensions	D.P.A. revisée J / M / A

PERTES DE SANG

PYREXIE

ALCOOL

MÉDICAMENTS

ALLERGIES

MAL. REINS		HYPERTENSION	
HYPERTENSION		MAL COEUR	
INFECTIONS		MALFOMATION	
MAL. THYROÏDE		MAL. GÉNÉTIQUES	
OPRATIONS			

PRODUITS LAITIERS

FRUITS ET LÉGUMES

GAIN : POIDS

ALCOOL

ALLAITEMENT

PLANS TRAV.

COIT

FEUILLE DE LA MÈRE - BLANCHE; FEUILLE DU MÉDECIN - JAUNE; FEUILLE DU BÉBÉ - ROSE

COCHER (✓) SI NORMAL

POITRINE		O.R.L.	
TÊTE, COU, THYROÏDE		VULVE	
ABDOMEN		COL	
VARICES		OVAIRES	

DATE DE LA PREMIÈRE VISITE J / M / A

SIGNATURE DU MÉDECIN

000137

DOSSIER PRÉNATAL No 2

MÉDECIN

NOM DU MALADE

ADRESSE

FACTEURS DE RISQUE RELEVÉS À LA PREMIÈRE VISITE

DPA J/M/A

J/M/A

TYPE SANGUIN	RHÉSUS	VDRL	TITRE RUBÉOLE	RÉSULTAT CYTOLOGIE	FOETO PROTÉINES

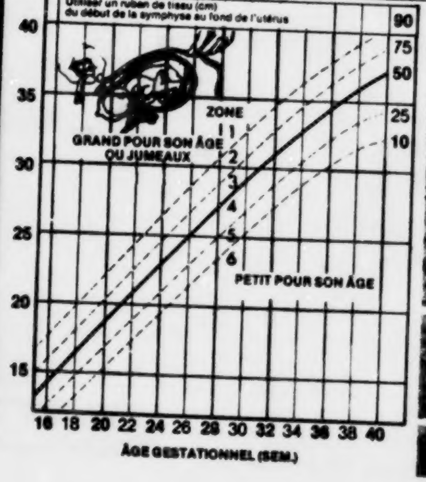
APPUYEZ FERMEMENT

FEUILLE DE LA MÈRE - BLANCHE; FEUILLE DU MÉDECIN - JAUNE; FEU... U BÉBÉ - ROSE

À CHAQUE VISITE PRÉNATALE, INSCRIRE LES CATÉGORIES COURANTES SUSMENTIONNÉES DE RISQUES DE GROSSESSE — A, B ou C — UTILISER CETTE CATÉGORIE POUR LE TRAITEMENT CONTINU DE LA GROSSESSE.

par ex.: C ENVISAGER LE TRANSFERT
B ENVISAGER UNE CONSULTATION

DEUX RISQUES MINEURS OU PLUS COMBINÉS PEUVENT PRODUIRE UN RISQUE SÉRIEUX DE GROSSESSE.



MESURER LA HAUTEUR DE SYMPHYSE-FOND DE L'UTÉRUS À CHAQUE VISITE PRÉNATALE ET L'INSCRIRE SUR LE GRAPHIQUE CI-CONTRE.

RÉFÉRENCE

SUJETS DE DISCUSSION

NUTRITION

REPOS

COURS PRÉNATAUX

TYPE D'ACCOUCHEMENT

ALLAITEMENT

CONGÉ PRÉCOCE

CONTRÔLE DES NAISSANCES

PÉDIATRE

SIGNATURE DU MÉDECIN

000138

GUIDE DE GRADATION DES RISQUES DE GROSSESSE

A chaque visite prénatale, indiquez votre évaluation des risques de la grossesse (foetus et mère) selon l'échelle de gradation suivante. Les facteurs de risques ou les problèmes énumérés ci-dessous ne sont que des *exemples*. Il reste des blancs où vous pouvez inscrire d'autres problèmes comportant des risques que vous avez relevés. Cette échelle de gradation des risques devrait servir de base à la planification du traitement continu de la grossesse.

CATÉGORIE A Grossesse sans risque prévisible

- ☐ AUCUNE MORTALITÉ PÉRINATALE ANTÉRIEURE OU BÉBÉ DE POIDS INFÉRIEUR
- ☐ AUCUNE MALADIE MÉDICALE IMPORTANTE
- ☐ AUCUNE COMPLICATION DE GROSSESSE MAINTENANT OU AUPARAVANT (Perte de sang, hypertension, travail prématuré)
- ☐ CROISSANCE APPAREMMENT NORMALE DU FOETUS

CATÉGORIE B Grossesse comportant des risques

Le foetus et (ou) la mère sont définitivement susceptibles à des complications et il faut obtenir une consultation d'un spécialiste en obstétrique de votre région. De plus, il faudra peut-être une consultation auprès d'un interniste de la spécialité voulue. On peut traiter ces cas grâce à des soins coopératifs continus dans une unité d'obstétrique où se fera l'accouchement et où existent des installations de soins infirmiers de niveau intermédiaire OU on peut les remettre entre les mains du médecin traitant en lui proposant une conduite à suivre applicable au reste de la grossesse.

- ☐ DIABÈTE, CATÉGORIE A (GESTATIONEL) OU CATÉGORIE B
- ☐ HYPERTENSION SANS TOXÉMIE
- ☐ HAP, TERMINÉ ET A L'HÔPITAL
- ☐ INCOMPÉTENCE CERVICALE
- ☐ HYDRAMNIOS
- ☐ GROSSESSE PASSÉ TERME (42 semaines +)
- ☐ ANTÉCÉDENTS DE MORTINAISSANCE OU DE DÉCÈS NÉONATAL
- ☐ OBÉSITÉ MATERNELLE
- ☐ USAGE IMPORTANT DE TABAC, D'ALCOOL, DE DROGUES
- ☐ IMMUNISATION AU RHÉSUS
- ☐ .....
- ☐ .....
- ☐ AFFECTION RÉNALE SANS HYPERTENSION
- ☐ TOXÉMIE BÉNIGNE
- ☐ TRAVAIL PRÉMATURÉ CONTRÔLÉ
- ☐ GROSSESSE MULTIPLE
- ☐ PRÉSENTATION PAR LE SIÈGE
- ☐ PRIMIGESTE (âge 35 +)
- ☐ ANTÉCÉDENTS FAMILIAUX DE TROUBLES GÉNÉTIQUES (Amniocentèse génétique ou besoin de consultation)
- ☐ ANÉMIE FERRIPRIVE RÉFRACTAIRE
- ☐ GAIN DE POIDS <10 liv à 30 semaines
- ☐ GRANDE MULTIPARE
- ☐ .....
- ☐ .....

CATÉGORIE C Grossesse à risque élevé

Grossesses si compliquées que le foetus et (ou) la mère sont manifestement en danger. Si cela est possible, on devrait transférer ces cas à un centre périnatal régional (niveau III) pour soins intensifs et accouchement. De toute évidence, il y a des cas qui méritent d'être classés dans cette catégorie de risques (problèmes de pertes de sang excessives avant parturition, prolapsus du cordon ou travail prématuré avancé non contrôlé) mais qu'on ne peut transférer en sécurité ou à temps pour que ce soit avantageux au foetus ou à la mère.

- ☐ DIABÈTE, CATÉGORIE C, D, F, R OU SUFFISAMMENT COMPLIQUÉ
- ☐ AFFECTION RÉNALE ACCOMPAGNÉE D'HYPERTENSION ±↓FONCTION
- ☐ RUPTURE PRÉMATURÉE DE LA POCHE DES EAUX (± SEPTICÉMIE)*
- ☐ PERTES DE SANG AVANT PARTURITION, CONTINUES OU REPÉTÉES*
- ☐ .....
- ☐ .....
- ☐ HYPERTENSION COMPLIQUÉE DE TOXÉMIE
- ☐ TRAVAIL PRÉMATURÉ NON CONTRÔLÉ*
- ☐ ARRÊT DE CROISSANCE IMPORTANT DU FOETUS (< 10epercentile)
- ☐ TROUBLES CARDIAQUES, SURTOUT AVEC DÉFAILLANCE
- ☐ .....
- ☐ .....

* en particulier 24 à 34 semaines de gestation

La présence de deux risques mineurs ou plus peut produire une grossesse à risque élevé.
Il se peut que ces cas méritent d'être dans une catégorie à risque plus élevé.

QUEBEC

DOSSIER OBSTÉTRICAL
OBSERVATION MÉDICALE

Cadre réservé à l'usage du centre hospitalier

Nom _____

Prénom _____

Adresse _____

_____ N° de téléphone _____

Âge _____ Date de naissance _____

N° d'assurance-maladie _____

ANTÉCÉDENTS FAMILIAUX

Tuberculose, hypertension, cardiopathie, diabète, allergie, cancer, troubles neuro-psychiatriques, grossesse gémellaire, anomalies.

Préciser:

ANTÉCÉDENTS MENSTRUELS

Premières menstruations	Cycle	Durée	D.D.M.	D.P.A.	Méthode anticonceptionnelle	Cessée depuis
ans	jours	jours				

ANTÉCÉDENTS PERSONNELS (✓ : positif O: négatif)

Antécédents éloignés				Antécédents récents (depuis les dernières menstruations)			
Maladies rénales		Phlébites, varices		Nausées		Rougeole — Varicelle	
Maladies cardiaques		Épilepsie		Vomissements		Autres infections virales	
Hypertension artérielle		Allergies aux médicaments		Mauvaise digestion		Irradiations, radiographie	
Rhumatisme articulaire aigu		Allergies		Constipation		Traumatismes	
Tuberculose		Dyscrasies sanguines		Céphalées		Médicaments	
Maladies vénériennes		Incompatibilité Rh ABO		Hémorragies (préciser)		Vaccins	
Maladies gynécologiques		Opérations antérieures		Pertes vaginales (préciser)		Drogues	
Infections virales		Accidents antérieurs		Oedème		Alcool	
Maladies neuro-psychiatriques		Vaccins		Transfusions de sang		Cigarette	
Diabète		Génétique		Douleurs abdominales (préciser)		Travail à l'extérieur	
Affections de la thyroïde		Immunoglobuline anti-D		Symptômes urinaires			

Préciser:

Grossesses antérieures			À terme	Prématurées	Dysmatures		Avortements	Enfants vivants	Grossesse multiple Grossesse ectopique	
N°	Date An | Mois | Jour	Centre hospitalier	Durée de la grossesse	Durée du travail	Incidents de l'accouchement	♂ ou ♀	Masse (poids)	Complications Chez la mère		Chez l'enfant
	| |									
	| |									
	| |									
	| |									
	| |									
	| |									
	| |									

AH-266

MÉDECIN TRAITANT

000140

DOSSIER OBSTÉTRICAL
OBSERVATION MÉDICALE

Cadre réservé à l'usage du centre hospitalier

Nom _____

Prénom _____

Adresse _____

_____ N° de téléphone _____

Âge _____ Date de naissance _____

N° d'assurance-maladie _____

EXAMEN PHYSIQUE			
Taille m	Masse (poids) avant la conception kg	Masse (poids) actuelle kg	
Yeux	Dents	Pharynx	Thyroïde
Cou	Peau	Coeur	Poumons
Seins	Mamelons	Tumeurs	
Abdomen		Colonne	
Membres inférieurs	Oedème	Varices	

EXAMEN GYNÉCOLOGIQUE			
Vulve			
Vagin			
Périnée			
Col			
Utérus			
	Correspondance entre le volume de l'utérus et l'âge de la grossesse		
Annexes			
Toucher rectal		Cul-de-sac de Douglas	
Pelvimétrie — Clinique	Promontoire	Épines sciatiques	
Pelvimétrie — Radiologique	Oui ☐ Non ☐	Si oui, date	
Dystocie prévue au détroit	supérieur ☐	moyen ☐	inférieur ☐
Cytologie	Oui ☐ Non ☐	Si oui, date	

Problèmes spéciaux

Type d'accouchement prévu	Type d'anesthésie prévu	Allaitement maternel prévu

2

_____ Date

_____ Signature

AH-267

MEDECIN TRAITANT

000111

Cadre réservé à l'usage du centre hospitalier

DOSSIER OBSTÉTRICAL

ÉVOLUTION DE LA GROSSESSE

Nom à la naissance _____

Prénom(s) _____

Adresse _____

_____ N° de téléphone _____

Âge _____ Date de naissance _____

N° d'assurance-maladie _____

Nom du conjoint _____

EXAMENS DE LABORATOIRE

B.W. _____ Date _____

Hb _____ Ht _____ Date _____

Groupe et Rh de la mère _____ Anticorps _____ Cytologie _____ Date _____

Urines (sommaire et culture) _____

D.P.A. selon: a m j

1. D.D.M. |_|_|_|_|_|_|

2. clinique |_|_|_|_|_|_|

3. échographie |_|_|_|_|_|_|

Visites prénatales (O: négatif, + : anormal, —: ne s'applique pas)

Cours prénatals ☐ oui ☐ non

D.D.M. / Date (a m j)	Semaines de grossesse	Hauteur du fond utérin	Masse (poids) kg	Tension artérielle	Albuminurie	Glycosurie	Coeur foetal	Nausées / Vomissements	Oedème	Position et présentation	Hémoglobine	Traitements ou remarques (échographie, amniocentèse, oestriol, épreuve de stress, anticorps)	Initiales
				/									
				/									
				/									
				/									
				/									
				/									
				/									
				/									
				/									
				/									
				/									
				/									
				/									
				/									

Remarques

AH-288 (rev. 10-90)

DOSSIER MÉDICAL

3

000142

AH-289 (rev. 10-80)

DOSSIER OBSTÉTRICAL
ÉVOLUTION DU TRAVAIL

Cadre réservé à l'usage du centre hospitalier

Nom de l'établissement ____________________

Date d'admission ____________ heure ____ h ____

Date du début du travail ____________ heure ____ h ____ ☐ spontané ☐ déclenché

Membranes ☐ intactes ☐ rompues ____________ (Date) h ________ liquide ________

État de la parturiente à son admission

☐ Rasage
☐ Lavement
☐ Glycosurie
☐ Albuminurie
☐ Hémogramme et groupe sanguin
☐ Culture d'urine

Par.
Ab.
Gr.
D.M.
Sem. de gestation
D.P.A.

Médecin prévenu à ________ h ________

Date	Heure (0-24)	T° (°C)	Pouls	Tension artérielle	Cœur fœtal	Contractions: Fréquence (min.)	Contractions: Durée (en s)	Contractions: Intensité 1 2 3 4	Membranes I. ou R.	Dilatation (en cm)	Effacement	Station	Ocytocique: Milliunités (par min.)	Ocytocique: Microgouttes (par min.)	Traitements et remarques	Initiales

DOSSIER MÉDICAL

000143

Cadre réservé à l'usage du centre hospitalier

DOSSIER OBSTÉTRICAL

COURBE DE FRIEDMAN (1)

Nom de l'établissement _____

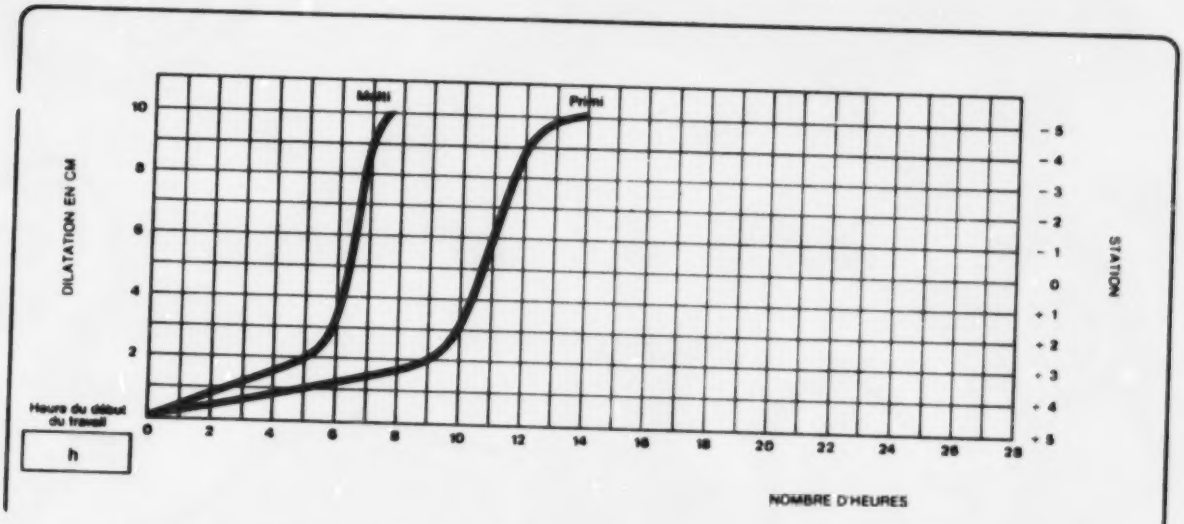
_____

Raison d'admission

☐ Membranes rompues ☐ Travail vrai ☐ Césarienne non urgente

☐ Suspension du travail ☐ Autre _____

☐ Indication du déclenchement _____



(1) Friedman, Emmanuel A. Labor in Multiparas. Extrait de: Obst. & Gynec. vol. 8 n° 6; 1956. p. 696.

Date	Heure	Médication (Inscrire la date, l'heure, le nom, la quantité et la voie d'administration)	Initiales
	h		
	h		
	h		
	h		
	h		
	h		
	h		
	h		
	h		
	h		
	h		
	h		

DOSSIER OBSTÉTRICAL
GROSSESSE, TRAVAIL ET ACCOUCHEMENT
ÉVOLUTION DE LA MÈRE ET
ÉVALUATION DU NOUVEAU-NÉ

Cadre réservé à l'usage du centre hospitalier

Nom de l'établissement _____

GROSSESSE, TRAVAIL ET ACCOUCHEMENT

D.D.M. a m j D.P.A a m j Groupe et Rh Anticorps

Par	Gr.	Ab	Enfants vivants	Particularités (complications ou diagnostics pendant cette grossesse ou les grossesses antérieures)

Présentation
☐ tête ☐ siège ☐ autre (préciser)

Travail ☐ Spontané ☐ Déclenché

Début du travail a m j _____h_____

Membranes rompues a m j _____h_____

1er stade durée _____
2e stade durée _____
3e stade durée _____
durée totale _____

Analgésie durant les 4 dernières heures (médicament, dosage)

Corticostéroïdes (date et heure de la première dose)

Anesthésie

Aucune	Générale	Bloc para-cervical	Épidurale	Bloc honteux	Locale
☐	☐	☐	☐	☐	☐

Accouchement a m j _____h_____

☐ Par voie vaginale ☐ Par césarienne

☐ TÊTE
- ☐ Spontané
- ☐ Forceps bas
- ☐ Forceps moyens
- ☐ Rotation

☐ SIÈGE
- ☐ Spontané
- ☐ Assisté
- ☐ Forceps

- ☐ Hérstive
- ☐ Transversale basse
- ☐ Médiane basse
- ☐ Classique
- ☐ Hystérectomie

Indication de la césarienne

Épisiotomie Aucune ☐ Médiane ☐ Médio-latérale ☐

Déchirure
Aucune ☐ Périnéale 1 2 3 4 ☐ Cervicale ☐ Vaginale ☐ Pertes sanguines _____ ml

Cordon ombilical
Clampage
☐ < 45 secondes après l'accouchement
☐ > 45 secondes après l'accouchement

Circulaires
☐ Lâches
☐ Serrés
☐ Coupés pendant l'accouchement
☐ Coupés après l'accouchement

Placenta Masse _____ g
☐ Évacuation spontanée
☐ Évacuation manuelle
☐ Vaisseaux ombilicaux 2 3
Anomalies

Complications
Aucune ☐ Méconium ☐ Détresse foetale ☐

Cœur foetal ☐ < 120 ☐ 120 à 160 ☐ Irrégulier ☐ Inaudible ☐ > 160
Monitorage ☐ clinique ☐ externe ☐ interne

Signature du médecin | Date

ÉVALUATION DU NOUVEAU-NÉ

Sexe ☐♂ ☐♀ ☐ Vivant ☐ Mort-né Masse _____ g

☐ Gouttes ophtalmiques ☐ Vitamine K ☐ Ondoyé

Alimentation ☐ Maternelle ☐ Artificielle ☐ homo. ☐ humanisé

Réanimation ☐ oui ☐ non

Ventilation ☐ Avec sac et masque ☐ Tube trachéal _____ min ☐ Aspiration trachéale

Asphyxie ☐ Aucune ☐ Modérée ☐ Importante

☐ Anomalies ☐ Complications — Spécifier

Parents informés ☐ oui ☐ non

APGAR	0	1	2	1 min	5 min	10 min
Battements cardiaques	Absents	Moins de 100	Plus de 100			
Efforts respiratoires	Absents	Lents irréguliers	Bons pleurs			
Tonus musculaire	Flasque	Flexion des extrémités	Mouvements actifs			
Réflexes à la stimulation	Absents	Grimace	Pleurs avec force			
Coloration des téguments	Bleue pâle	Corps rose extrémités bleues	Entièrement rose			
Remarques			Total			

Nom du médecin qui suit l'enfant | Date

ÉVOLUTION DE LA MÈRE

Suites de couche
☐ Normales
☐ Anormales
Hb la plus basse _____
Dernière Hb _____

Hémorragie des suites de couche
☐ Immédiate
☐ Tardive
Transfusion _____ sacs

Immunoglobuline anti-D
Donnée le a m j
par

Sort à la sortie a m j Vivante ☐ Décédée ☐ Transférée ☐
Date

Fièvre ☐ oui ☐ non Si oui préciser s'il y a lieu
☐ Endométrite ☐ Infection de plaie ☐ Autre
☐ Autre infection pelvienne
☐ Thrombo-embolie
☐ Infection urinaire
☐ Infection respiratoire

Signature du médecin | Date

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DOSSIER DE LA MÈRE

000145

OBSTETRICAL CHART
MEDICAL HISTORY

QUEBEC

Space reserved for the use of the hospital center

Surname _____

Given name(s) _____

Address _____

_____ Telephone No. _____

Age _____ Date of birth _____

Health insurance no. _____

Name of spouse _____

FAMILY HISTORY

Tuberculosis, hypertension, cardiopathy, diabetes, allergy, cancer, neuro-psychiatric diseases, twins, anomalies, genetic diseases

Specify:

MENSTRUAL HYSTORY

MENARCHE	CYCLE	DURATION	L.M.P.	E.D.C.	BIRTH CONTROL METHOD	STOPPED SINCE
Years	Days	Days	yr m day	yr m day		yr m day

PERSONAL HYSTORY (O: negative, +: abnormal, —: not applicable

PAST MEDICAL HYSTORY				RECENT HYSTORY, SINCE L.M.P.			
Renal diseases		Phlebitis, varicose veins		Nausea, vomiting		Other viral infection	
Cardiac diseases		Epilepsy		Constipation		Exposure to radiation X-Rays	
Arterial hypertension		Drug allergies		Headache		Accidents	
Acute articular rheumatism		Allergies		Hemorrhage (specify)		Medication	
Tuberculosis		Blood dyscrasia		Vaginal discharge (specify)		Vaccines	
Veneral diseases		RH abo incompatibility		Edema		Drugs	
Gynecological diseases		Previous surgery		Bloods transfusions		Alcohol	
Viral infections		Previous accidents		Abdominal pain (specify)		Cigarettes (number)	
Neuro-psychiatric diseases		Pertinent vaccines		Urinary symptoms		Work	
Diabetes		Genetic		Rubella, measles			
Thyroid diseases		Rhogam		Herpes vaginalis			

Specify:

HISTORY OF PAST PREGNANCIES

Total number of previous pregnancies				Term	Premature			Abortions	Livebirths
No.	DATE yr m day	Type of delivery	Duration of gestation	Duration of labour	Type of anaesthesia	♂ or ♀	Weight	Complications: Mother	Complications: Child

AH-288A (rev. 10-80)

Signature _____

MEDICAL RECORD

000146

OBSTETRICAL CHART
MEDICAL HISTORY

Space reserved for the use of the hospital center

Surname _____

Given name(s) _____

Address _____

_____ Telephone No. _____

Age _____ Date of birth _____

Health insurance No. _____

Name of spouse _____

PHYSICAL EXAMINATION

Height (meters) m	Weight before pregnancy Kg	Weight now Kg	
Eyes	Teeth	Pharynx	Thyroid
Neck	Skin	Heart	Lungs
Breasts	Nipples	Tumours	
Abdomen		Spine	
Lower limbs	Edema	Varicose veins	

GYNECOLOGICAL EXAMINATION

Vulva					
Vagina					
Perineum					
Cervix					
Uterus					
				Relationship between size of uterus and weeks of gestation	
Annexae					
Rectal				Pouch of Douglas	
Pelvimetry	Clinical	Promontary		Ischial spines	
	Radiological	Yes ☐	No ☐	If yes, date	yr m day
Dystocia anticipated		Inlet ☐	Midplane ☐	Outlet ☐	
Cytology	Yes ☐	No ☐	If yes, date	yr m day	

Special problems

Type of delivery anticipated	Type of anaesthesia anticipated	Breast feeding anticipated

_____ Date

_____ Signature

AH-287A (rev. 10-80)

HOSPITAL CENTER

000147

OBSTETRICAL CHART
EVOLUTION OF PREGNANCY

Space reserved for the use of the hospital center

Surname _____

Given name(s) _____

Address _____

_____ Telephone No. _____

Age _____ Date of birth _____

Health insurance No. _____

Name of spouse _____

LABORATORY INVESTIGATIONS

B.W. _____ Date _____

Hb _____ Ht _____ Date _____

Mother's Rh group _____ antibodies _____ Cytology _____ Date _____

Urine (summary and culture) _____

E.D.C. according to

	yr	m	day
1. L.M.P.			
2. Clinical			
3. Echography			

PRENATAL VISITS (0: negative + : abnormal – : not applicable)

Prenatal courses ☐ Yes ☐ No

L.M.P.

DATE (yr m day)	Weeks of gestation	Height of fundus of uterus	Weight kg	Arterial tension	Albuminuria	Glycosuria	Fetal heart	Nausea / Vomiting	Edema	Position and presentation	Hemoglobin	TREATMENT AND REMARKS (Echography, amniocentesis, estriol, stress test, antibodies)	Initials
				/				/					
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				/				/					
				/				/					

Remarks:

3

AH-289A (rev. 10-80)

OBSTETRICAL CHART
EVALUATION OF LABOUR

Space reserved for the use of the hospital center

Name of establishment ____________________

Date of admission ______________ Hour ____ h ____

Date of on set of labour ______________ Hour ____ h ____ ☐ Spontaneous ☐ Induced

Membranes ☐ Intact ☐ Ruptured ______________ h ________ Amniotic fluid __________
Date

STATE OF PATIENT UPON ADMISSION

☐ Shave prep. Para
☐ Enema AB
☐ Glycosuria GR
☐ Albuminuria D.M.:
☐ Hemogram and blood group Weeks of gestation
☐ Urine culture E.D.C.

Physician notified at ________ h ________

Date	Time (0 - 24)	Temperature (°C)	Pulse	Arterial tension	Fetal heart	Contractions: Frequency (min)	Contractions: Duration (sec)	Contractions: Intensity 1 + to 4 +	Membranes I or R	Dilatation (cm)	Effacement	Station	Oxytocic concentration: Milli units (min)	Oxytocic concentration: Microdrips (min)	Treatment and remarks	Initials
				/												
				/												
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MEDICAL RECORD

Space reserved for the use of the hospital center

OBSTETRICAL CHART

FRIEDMAN'S CURVE

Name of establishment _____

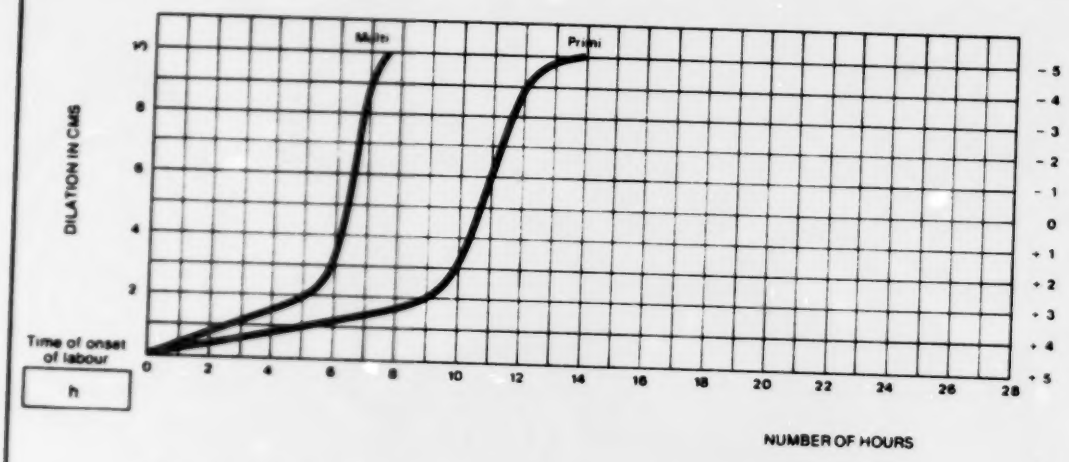
_____

Reason for admission

☐ Ruptured membranes ☐ True labour ☐ Elective c. section

☐ False labour ☐ Other _____

☐ Induction _____



(1) Friedman, Emmanuel A. Labor in Multiparas. Extrait de: Obst. & Gynec. vol. 8 n° 6; 1956. p. 696.

Date	Time	Medication (indicate date, time, name, dosage, and route of administration)	Initials
	h		
	h		
	h		
	h		
	h		
	h		
	h		
	h		
	h		
	h		
	h		
	h		

5

AH-371A prev. 10-83

MEDICAL RECORD

000150

OBSTETRICAL CHART
PREGNANCY, LABOUR AND DELIVERY
EVOLUTION OF THE MOTHER AND
EVALUATION OF THE NEWBORN

Space reserved for the use of the hospital center

Name of establishment _____

PREGNANCY, LABOUR AND DELIVERY

L.M.P. yr m day E.D.C. yr m day Group and Rh Antibodies

Par	Gr	Ab	Live children	Peculiarities (complications or diagnostics since this pregnancy or past pregnancies)

Presentation
☐ Vertex ☐ Breech ☐ Other (specify)

Labour ☐ Spontaneous ☐ Induced

Onset of labour yr m day _____ h _____

Membranes ruptured yr m day _____ h _____

1st stage duration _____
2nd stage duration _____
3rd stage duration _____
Total duration _____

Analgesia during last 4 hours (medicines, dosage)

Corticosteroids (date and hour of 1st dosage)

Anaesthesia
None ☐ General ☐ Para-cervical ☐ Epidural ☐ Pudental ☐ Local ☐

Delivery yr m day _____ h _____
☐ Vaginal ☐ Caesarian section

☐ VERTEX
- ☐ Spontaneous
- ☐ Low forceps
- ☐ Mid forceps
- ☐ Rotation

☐ BREECH
- ☐ Spontaneous
- ☐ Assisted
- ☐ Forceps

- ☐ Iterative
- ☐ Low transverse indication
- ☐ Low median
- ☐ Classical
- ☐ Hysterectomy

Indication of cesarian section

Episiotomy None ☐ Median ☐ Medio-lateral ☐

Laceration
None ☐ Perineal 1 2 3 4 ☐ Cervical ☐ Vaginal ☐ Blood loss _____ cc

Umbilical cord
Clamping
- ☐ < 45s after delivery
- ☐ > 45s after delivery

Expression of umbilical cord
- ☐ Loose
- ☐ Tight
- ☐ Cut during delivery
- ☐ Cut after delivery

Placenta
Mass _____ g
- ☐ Spontaneous
- ☐ Manual
- ☐ Umbilical vessels 2 3

Anomalies

Complications
None ☐ Meconium ☐ Fetal distress ☐

Fetal heart
- ☐ < 120
- ☐ 120 160 ☐ Irregular
- ☐ > 160 ☐ None

Monitoring
- ☐ Clinic
- ☐ Out-patient
- ☐ In-patient

Signature of physician | Date

EVALUATION OF NEWBORN

Sex ☐♂ ☐♀ ☐ Living ☐ Stillborn Mass _____ g

☐ Ophtalmic drops ☐ Vitamin K ☐ Baptized privately

Nourishment ☐ Maternal ☐ Artificial ☐ homo ☐ simil maternal

Resuscitation ☐ Yes ☐ No
Ventilation ☐ With sack and mask ☐ Tracheal tube _____ min ☐ Tracheal aspiration

Asphyxia ☐ None ☐ Moderate ☐ Severe

☐ Anomalies
☐ Complications

Remarks

Parents informed ☐ Yes ☐ No

APGAR	0	1	2	1 min	5 min	10 Min
Heart rate	Absent	Slow (below 100)	Over 100			
Resp. rate and effort	Absent	Slowing, irreg	Good crying			
Muscle tone	Flaccid	Flexion of ext	Active motion			
Reflex irritability	No response	Grimace	Cry			
Color	Blue pale	Body pink ext. blue	All pink			
Remarks			Total			

Name of physician caring for child | Date

EVOLUTION OF THE MOTHER

Post partum course
☐ Normal
☐ Abnormal
Lowest HGB _____
Last HGB _____

Post partum haemhorrage
☐ Immediate
☐ Late
Transfusion _____ sacks

Immunoglobuline anti-D
Given a m j
par

Condition on discharge Date yr m day
Alive ☐ Deceased ☐ Transferred ☐

Fever ☐ Yes ☐ No If yes, state as the case may be
- ☐ Endometritis
- ☐ Wound infection
- ☐ Other
- ☐ Other pelvic infection
- ☐ Thrombo-embolism
- ☐ Urinary infection
- ☐ Respiratory infection

Signature of physician | Date

AH-272A (rev. 10-80)

MOTHER'S RECORD

000151

THE MEDICAL SOCIETY OF NOVA SCOTIA PRENATAL RECORD (REVISED 1982)

NOVA SCOTIA

FOR COPIES CONTACT: REPRODUCTIVE CARE PROGRAM, 5821 UNIVERSITY AVENUE, HALIFAX, NOVA SCOTIA, B3H 1W3

NAME | ADDRESS | PHONE

DOCTOR | HOSPITAL | MED. INS. NO.

AGE | MENSTRUAL CYCLE | PILL STOPPED | LNMP | EDC

OBSTETRICAL HISTORY

GRAV _____ PARA _____ ABORT _____ ALIVE _____ SB _____ NND _____

PREM _____ IUGR _____ CONG. ABN _____ C/S _____

YEAR	WT	GEST	COMPLICATION	HOSPITAL OF DELIVERY

HOSPITAL COPY — Prenatal Score on Flip Side

	YES	NO
BREASTFEEDING	☐	☐
PRENATAL CLASSES	☐	☐
ADEQUATE DIET	☐	☐
ALLERGIES	☐	☐
MEDICATIONS	☐	☐
PREV. TRANS	☐	☐

HIGH RISK SCORE

1st VISIT ☐ 36 WEEKS ☐

FAMILY HISTORY

e.g. DIABETES | HYPERTENSION | TWINS | HEREDITARY DISEASE

PAST HEALTH

e.g. DIABETES | EPILEPSY | U.T.I. | SURGERY

FUNCTIONAL ENQUIRY

HYPERTENSION | RENAL DIS. | SMOKING | ALCOHOL

SOCIAL HISTORY

(OCCUPATION, SPECIAL PARENTING NEEDS, ETC.)

EXAMINATION

DATE | PRE-PREG WEIGHT | B.P. | HEIGHT

HEAD AND NECK | BREASTS | PELVIC

HEART | LUNGS | CX

ABDOMEN | EXTREMITIES | CORPUS

ADNEXA

OBSTETRIC PELVIC ASSESSMENT

LAB DATA

HGB | RUBELLA TITRE

VDRL | BLOOD SUGAR

GROUP | Rh

HUSBAND'S Rh

ANTIBODIES _____

_____

_____

_____

28 WEEK Rh IMMUNE GLOBULIN DATE:

URINE	P	S	MICRO	C AND S	PREG. TEST DATE
CERVIX	PAP			G C C AND S	QUICKENING DATE

DATE	WT	BP	URINE P / S	GESTATION WEEKS	FUNDAL HEIGHT cm: SYMPH	PRESENTATION	FH	RISK SCORE	RETURN IN	HGB AND REMARKS

000152

DELIVERY RECORD

TYPE OF LABOUR

INDUCTION

ANAESTHESIA

DATE OF BIRTH

HOUR OF BIRTH

PRES. POS.

BABY-SEX

SPONTANEOUS

WEIGHT

BLOOD LOSS

ASPHYXIA NEONATORUM

FORCEPS

L.B./S.B./N.N.D.

THIRD STAGE

EPISIOTOMY

NURSING

COMPLICATIONS:

DOCTOR'S SIGNATURE

POSTPARTUM EXAMINATION

DATE

WEIGHT

B.P

HAEMOGLOBIN

URINE

FAMILY PLANNING

LOCHIA

MENSES

NURSING

BREASTS

PELVIS

CERVIX

PERINEUM

CORPUS

MATERNAL HISTORY & PHYSICAL

Date Time

Family History: **Details:**

- ☐ TB
- ☐ Diabetes
- ☐ Allergies
- ☐ Other Specify:
- ☐ Epilepsy
- ☐ Hypertension
- ☐ Heart Disease
- ☐ Nervous & Mental
- ☐ Multiple Birth
- ☐ Heriditary Disease
- ☐ Malignant Hyperthermia

Medical History: **Details:**

- ☐ Kidney Disease
- ☐ Heart Disease
- ☐ Hypertension
- ☐ Rheumatic Fever
- ☐ Tuberculosis
- ☐ Venereal Disease
- ☐ Gyn. Disorder
- ☐ German Measles
- ☐ Nervous & Mental
- ☐ Diabetes
- ☐ Thyroid Function
- ☐ Phlebitis, Varicos.
- ☐ Blood Dyscrasia
- ☐ **Allergies**
- ☐ **Drug Reactions**
- ☐ Blood Transfusions
- ☐ RH, ABO Sensitivity
- ☐ Operations, Accidents
- ☐ Other:

Hist. ..ince last Menstrual Period: **Details**

- ☐ Nausea
- ☐ Vomiting
- ☐ Indigestion
- ☐ Constipation
- ☐ Headache
- ☐ Edema
- ☐ Bleeding (Specify)
- ☐ Vaginal Discharge
- ☐ Abdominal Pain
- ☐ Urinary Complaints
- ☐ German Measles
- ☐ Other Virus
- ☐ Radiation (Specify)
- ☐ Accidents
- ☐ Medications
- ☐ Other:

Menstrual History: Onset at age ☐ Pattern: ☐ days

LMP ☐ Normal? Yes ☐ No ☐

EDC ☐ Present Gestation ☐

DATES

Last B.C. Pill ☐

Pos. Preg. Test ☐

First ☐

Summary of Previous Pregnancies (Include Abortions): No. of Living Children ☐

No.	Year	Place of Confinement	Gest.	Dur. of Labour	Type of Delivery	Weight	Sex	Complications

Signature

RCP/01

DATE/TIME	

RCP/01

MATERNAL HISTORY & PHYSICAL

Physical Examination:		
Ht.:	Pres. Wt.	Wt. at EMP
Optic Fundi	Teeth	Thyroid
Heart	B.P.	ENT
Lungs	Skin	
Breasts	Nipples	Tumors
Abdomen	Height of Fundus	
Fetal Heart	Presentation and Position	Amniotic Fluid Vol.
Extremities	Varicosities	Edema
Pelvic Exam:	CNS	Reflexes

Labour: ☐ Yes ☐ No ☐ Suspected

Risk Score

Low Risk : 0 - 2
High Risk : 3 - 6
Extreme Risk : ≥ 7

Summary Diagnoses, Problems and Management:

Date/Time **Signature**

RCP/01

ANTE-NATAL RISK ASSESSMENT

I Reproductive History

< 16 = 1
Age 16 - 35 = 0
> 35 = 2

0 = 1
Parity 1 - 4 = 0
5+ = +2

Past OB History

- Habitual Abortion / Infertility = 1
- P.P.H. / Manual Removal = 1
- Baby 9 lbs. (4082 gm.) = 1
- Baby 5.5 lbs. (2500 gm.) = 1
- P.E.T. / Hypertension = 1
- Previous Caesarean = 2
- Stillbirth or Neonatal Death = 3
- Prolonged Labour or Difficult Delivery = 1

Category Score _____

II Associated Conditions

- Previous Gynecological Surgery = 1
- Chronic Renal Disease = 2
- Gestational Diabetes = 1
- Diabetes Mellitus = 3
- Cardiac Disease = 3

Other Medical Disorders

(Chronic Bronchitis, Lupus, etc.)

Score according to Severity (1 to 3)

Category Score _____

III Present Pregnancy

Bleeding
- < 20 Weeks = 1
- ≥ 20 Weeks = 3

Anemia < 10 GM % = 1

Prolonged Pregnancy (42 Weeks) = 1

Hypertension = 2

Premature Rupture Membranes = 2

Polyhydramnios = 2

Small For Dates = 3

Multiple Pregnancy or Breech or Malpresentation = 3

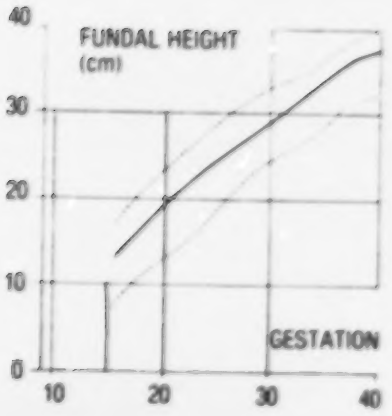
RH Isoimmunization = 3

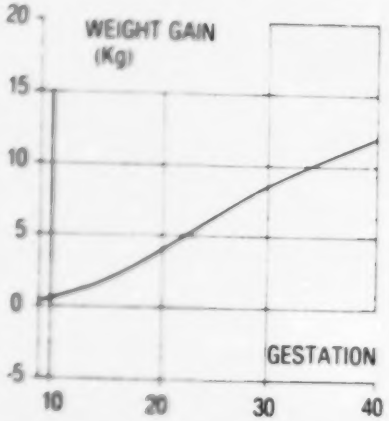
Category Score _____

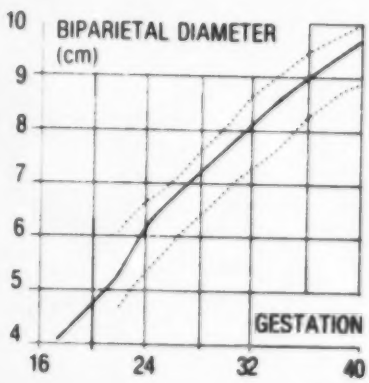
Total Risk Score _____

Coopland & Al. Time

Low Risk	**0 - 2**
High Risk	**3 - 6**
Extreme Risk	**≥ 7**







/ RCP/01

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ANTEPARTUM/INTRAPARTUM NURSING ADMISSION

Admission

Date
Time

Method of Admission
☐ Ambulatory
☐ Wheelchair
☐ Stretcher

Accompanied by
Is this your usual hospital of obstetrical care ☐ Yes ☐ No
If no, referral by physician ☐ or self ☐

Reproductive History

Grav
Para
Abort
S B
N D

LMP
EDC dates
GEST in wk

Prenatal Complications: ☐ Yes ☐ No Specify:
Prev. Adm. this preg ☐ Yes ☐ No When?
Prev. C/S ☐ Yes ☐ No Specify:

Lab

	Date			Date
Blood Grp			VDRL	
Rh Titre			Hgb (Adm)	
Rh Serum			Rubella Titre	

Date Where

Pelvic X-Ray ☐ Yes ☐ No
Ultrasound ☐ Yes ☐ No
Other Tests ☐ Yes ☐ No
Specify

Pertinent History

	Yes	No	Specify:
Drug Allergies	☐	☐	
Other Allergies	☐	☐	
Medications	☐	☐	
Non-Medical Drugs	☐	☐	
Special Diet	☐	☐	
Dentures	☐	☐	
Contact Lenses	☐	☐	
Glasses	☐	☐	

Smoker ☐ Yes ☐ No Cig./Day in Preg. Cig./Day before Preg. No. of Yrs
Alcohol ☐ Yes ☐ No Drinks/Wk in Preg. Drinks/Wk before Preg. No. of Yrs

Reason for Admission

Labor ☐ Yes ☐ No (if yes)
Prep ☐ Yes ☐ No
Enema ☐ Yes ☐ No

Physical Assessment

Pres. Wt
Wt. Gain
Fundal Ht

Abd. Palpation:
Presentation
Position
Engagement

T
P
R
FH

BP
Reflexes
Edema

URINE:
Protein
Sugar
Acetone

Additional Information

	Yes	No
Prenatal Classes	☐	☐
Breast Feeding	☐	☐
Rooming In	☐	☐
Keeping Baby	☐	☐
Seeing Baby	☐	☐
Social Worker Consult	☐	☐

Patient's Requests

Nursing Plan/Comments

High Risk Score

Time Dr. Notified
Dr.

Signature

RCP/82

PARTOGRAM

RCP/03

Admission	Date		Onset Regular Conts	Date	Time ____ hrs.
	Time ____ hrs.		Membranes		
Last Solid Food Intake	Date		☐ Intact ☐ S.R.M. ☐ A.R.M.	Date	Time ____ hrs.
	Time ____ hrs.		☐ Questionable	Date	Time ____ hrs.
Time Dr. Notified			Color of Fluid		Quantity of Fluid
Dr.					

TIME		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Cervix ●	10																10
	9																9
-3	8																8 -3
-2	7																7 -2
-1	6																6 -1
0	5																5 0
+1	4																4 +1
+2	3																3 +2
+3	2																2 +3
Descent x	1																1
	0																0
Caput																	
Molding																	
Amniotic Fluid/Color																	
Show/Vag Bleeding																	
URINE	Sugar																
	Protein																
	Acetone																
Intake																	
Output																	
Temperature																	
Respirations																	
Reflexes																	

Patient's Name and Hospital #

RCP/03

TIME: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

CONT'S

Medication

Drops/Min

Units/500 cc

Drugs
IV Fluids
Epidural

F.H.R. ✓
200 190 180 170 160 150 140 130 120 110 100 90 80 70

B.P. •
Pulse x
220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60

Nurse's Signature

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IMMEDIATE POSTPARTUM

	Initial P.P. checks			15 min x 5			30 min x 2			1 hr. x 4					
Time															
B.P.															
Pulse															
Lochia															
Fundus															
Episiotomy															
Voiding															
Nsg. Signature															

Infant:

Transfer Time
To Nursery _____

Condition _____

Signature _____

Mother:

Transfer Time
to Postpartum _____

Condition _____

Signature _____

Date	Time	

RCP/03

Delivery Room Data

Fully Dilated: Date _____ Time _____ hrs.

Transferred to Delivery Room _____ At _____ hrs.

Electronic Monitoring: Yes ☐ No ☐

F.H. after every cont. in 2nd Stage if not monitored

F.H. Taken Last: Rate _____ Time _____ hrs.

Summary of F.H.R. Tracing: _____

Nurse's Delivery Room Note

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Signature of Nurse

Mother's Companion: None ☐ Male ☐ Female ☐ Present During Labour ☐ Present At Delivery ☐

Neonatal Backup: Yes ☐ No ☐ Indication _____ Time Called _____ hrs. Time Arrived _____ hrs.

Catheterized: Yes ☐ No ☐ Time _____ hrs. Type _____

Sutures: Yes ☐ No ☐ Type _____ Sponge Count Correct: Yes ☐ No ☐

Needle Count Correct: Yes ☐ No ☐

Fill In If Applicable:

Doctor _____ Time Called _____ Time Arrived _____

Resident _____ Intern _____ Student _____

Anaesthetist _____ Resident Anaesthetist _____ Scrub Nurse _____

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LABOR DELIVERY RECORD

LMP | Antepartum Status | ABO | Rh

E.D.C. | Grav. | BLOOD GR.

Gestn. At Del. | Para | Rh TITRE

☐ Singleton | Abort | VDRL

☐ Twins | S.B. | HGB

☐ Other | N.N.D. | Rubella Titer

Press Firmly

MEDICAL HISTORY
☐ Normal
☐ Abnormal Specify:

Problems Prev. Preg. or Infant
☐ No
☐ Yes Specify:

COMPLICATIONS OF THIS PREGNANCY ☐ None
☐ Bleeding ☐ Toxemia ☐ Diabetes
☐ PROM ☐ Prem. Labour ☐ IUGR
☐ Other Comment:

MEDICATIONS ☐ Yes ☐ No Specify:
SMOKING ☐ Yes ☐ No Cigs/Day

FIRST STAGE: Onset Date | Time hrs. | Duration

☐ Spontaneous
☐ Induced — ☐ Arm, ☐ Oxytocin, ☐ Prostaglandin
☐ Stimulated — ☐ Arm, ☐ Oxytocin, ☐ Prostaglandin

Indication For Induction:

MEMBRANE RUPTURE Date
☐ Spont. Time hrs.
☐ Questionable
☐ Arm Duration at Delivery hrs.
☐ T. ≥ 38 in Labour

☐ **MECONIUM** ☐ Yes ☐ No
Time First Noted

SECOND STAGE: Onset Date | Time | Duration

FETAL HEART
☐ Normal
☐ Abnormal Specify:

DELIVERY: Date | Time

☐ Spontaneous
☐ Precipitate
☐ Operative
Position at Delivery

Forceps: ☐ Easy ☐ Moderate ☐ Difficult ☐ Trial only ☐ Outlet ☐ Low Mid ☐ Mid

Last Fetal pH | Time hrs.
Last Maternal Blood Sugar | Date | Time hrs.

Rotation: ☐ Manual ☐ Forceps
Position at Interference
Position at Delivery

Breech: ☐ Spont. ☐ Assisted ☐ Forceps ☐ Extracted

Caesarean: Uterine Incision ☐ Trans. ☐ Vertical ☐ Hysterectomy

DRUGS TIME	(Within 24 Hours) Drug/Dose/Route

Indication for Operative Procedure

Episiotomy: ☐ None ☐ Midline ☐ Mediolateral

Lacerations: ☐ None ☐ Cervical ☐ Vaginal ☐ Anal Sphincter ☐ Anal Mucosa ☐ Perineal ☐ Sutures

THIRD STAGE: Completed Date | Time hrs. | Duration

Placenta Delivery | Weight gm. | Abnormalities:

☐ Spont. ☐ Assist. ☐ Manual

UMBILICAL VESSELS ☐ 3 ☐ 2

Oxytocic: ☐ None ☐ Before Separation ☐ After Separation
Type | Dose | Route

Blood Loss
Before Del. ml.
After Del. ml.

Anaesthesia:
☐ None ☐ Epidural ☐ Local ☐ General ☐ Pudendal ☐ Other ☐ Wedge used (15° Tilt)
Lowest B.P.
Start Time

☐ Oxytocin Drip Postpartum | P.P.H. ☐ Yes ☐ No

BABY: ☐ Girl ☐ Boy | Weight gm.

☐ Liveborn
☐ Stillbirth: Date Last Fetal Movements | Date Last Fetal Heart

CONDITION AT BIRTH:	1 min.	5 min.
Tone		
Colour		
Respiration		
Response		
Heart Rate		
APGAR SCORE		

Age First Breath min.
Age at First Cry min.
Age Sust. Resp. min.

EYE MEDS

Asphyxia: ☐ None ☐ Moderate ☐ Severe
☐ Cord pH Done

RESUSCITATION: ☐ None ☐ Oxygen Only ☐ Pos. Pres. Bag and Mask ☐ Pos. Pres. Bag and Tube
Pos. Pres. Began Age to

INFANT EXAM: ☐ Normal ☐ Abnormal Specify:

Signature

Nurse Attending

Delivered by Physician

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MATERNAL POSTPARTUM FLOW SHEET

Date	Time	Breasts Normal (N) Engorged (E)	Fundus	Lochia Rubra (R) Serosa (S) Alba (A)	Episiotomy OK ✓	Voiding normal (N)	B.M.	Homan's Sign	Medication & Progress

RCP/05

PROGRESS REPORT SHEET (NORMAL) AND TEACHING GUIDE

Tick (✓) or use symbol where appropriate
Use (X) where abnormal and describe on Progress Notes

Date										
Breasts Normal (N) Engorged (E)										
Fundus f.b. ↑ or ↓ O										
Lochia — Rubra (R) Serosa (S) Alba (A)										
Incision — OK (✓)										
Episiotomy — OK (✓)										
Homan's Sign (—) Sign (+)										
B.M.										
Suppos. Results — good ✓ nil 0										
Enema — effective ✓ non-effective 0										
Voiding-normal (N)										
Nurse's Signature 0700 - 1900 or day										
1900 - 0700 or evening										
Students or nights										

Patient Teaching	**Date / Signature**	**Comments**	**Patient Teaching**	**Date / Signature**	**Comments**
Perineal Care			Pre-Op Teaching		
Sitz Bath			Post-Op Teaching		
Basic Breast Care			Incision Care		
Breast Feeding			Discharge Teaching		
Self Breast Exam					
Baby Bath			Infant Nutrition		
Return Bath			Family Planning		
Formula Prep / Feeding			Breast Feeding		
Diapering / Positioning			Exercises		
			Parenting Discussion		

RCP/05

MATERNAL & NEWBORN
PROGRESS SHEET

Date Time	

RCP/06

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PHYSICIAN
NEWBORN ADMISSION & DISCHARGE

Birth Date	Birth Weight (gm.)	Head Circ. (cm.)	Body Length (cm.)

Clinical Gestational Assessment

	<36 wk.	36-37 wk.	38-40 wk.	41 + wk.
Breast Tissue	☐ Absent	☐ 2mm	☐ 4mm	☐ 7mm
Sole Creases	☐ Single Ant. Crease	☐ Anterior 1/3	☐ Few Posterior	☐ Full
Ear Cartilage	☐ Nil	☐ Some	☐ Stiff	
Testes	☐ In Canal	☐ Descended		
Scrotum	☐ Few Rugae	☐ More		

Gestational Age (Dates) _____ wk.

Gestational Assessment (Physical Exam) _____ wk.

Hypoglycemia Screening Yes ☐ No ☐

Time _____

Dextrostix Results _____

Admission Exam ☑ Normal ☒ Abnormal

- ☐ General — Tone, Activity, Colour
- ☐ Skin
- ☐ Nutritional Status — Soft Tissue Wasting ☐ Yes ☐ No
- ☐ Skull Shape
- ☐ Fontanelle and Sutures
- ☐ Eyes
- ☐ Ears
- ☐ Nose
- ☐ Mouth
- ☐ Palate
- ☐ Respiratory System
- ☐ Heart
- ☐ Femoral Pulsations
- ☐ Abdomen - Liver (.....cm.)
  Spleen (.....cm.)
- ☐ Umbilicus
- ☐ Anus
- ☐ Genitalia
- ☐ Neurological
- ☐ Skeletal. Clavicle
  Hips
  Feet

Date _____ Signature _____

Comments

Date _____ Signature _____

Discharge Exam ☑ Yes Comments if Abnormal

- ☐ Tone and Activity
- ☐ Skin — Jaundiced ☐ Yes ☐ No
- ☐ Heart
- ☐ Respiratory
- ☐ Umbilicus
- ☐ Circumcision
- ☐ Feeding ☐ Breast ☐ Bottle Formula Type
- ☐ Discharge Weight _____ gm.
- ☐ Blood Group _____
- ☐ Hgb _____

Discharge Diagnosis

- ☐ Normal
- ☐ Other

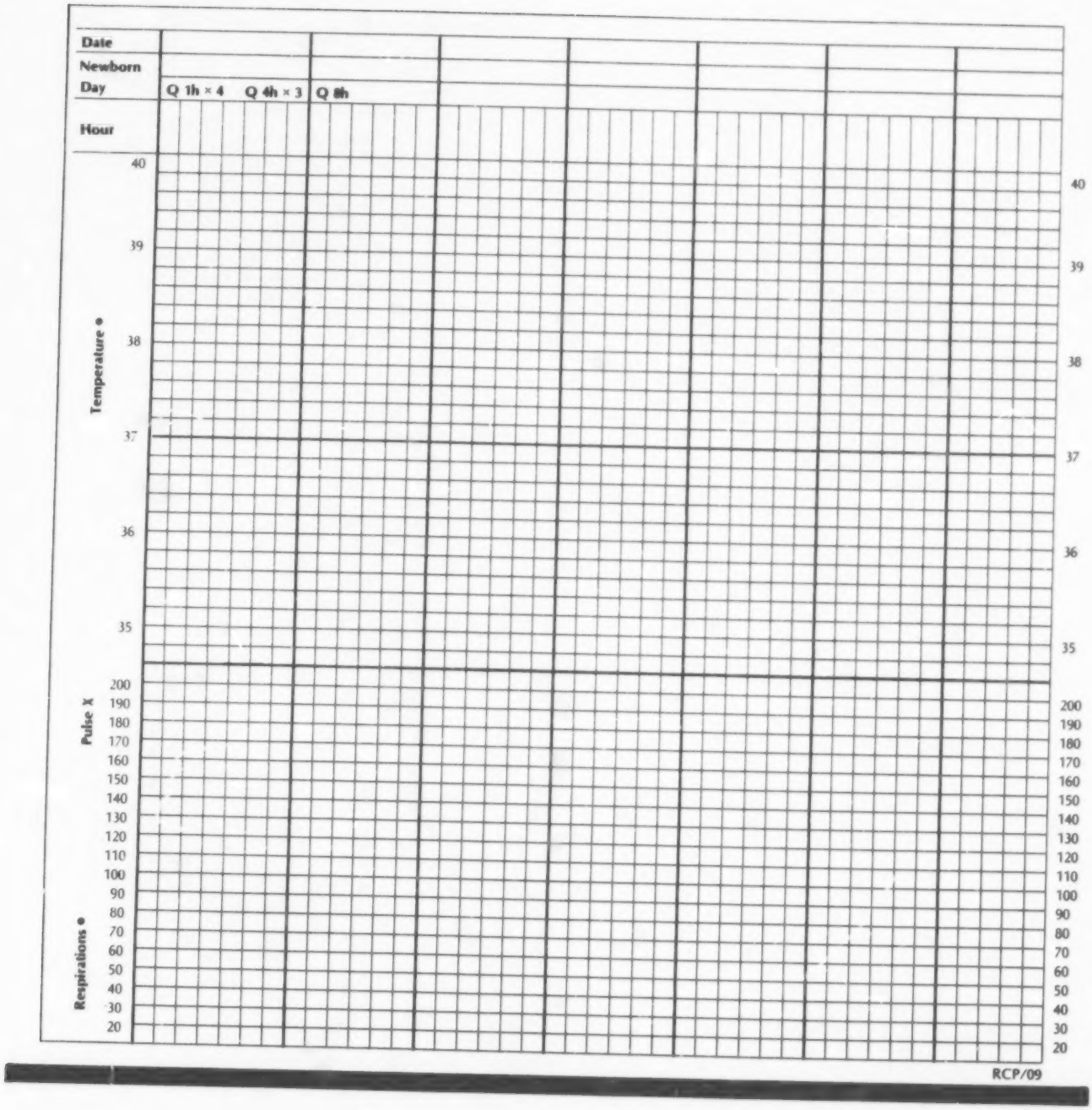
Date _____ Signature _____

Comments

Date _____ Signature _____

White - chart Canary - Physician

NEWBORN T.P.R.



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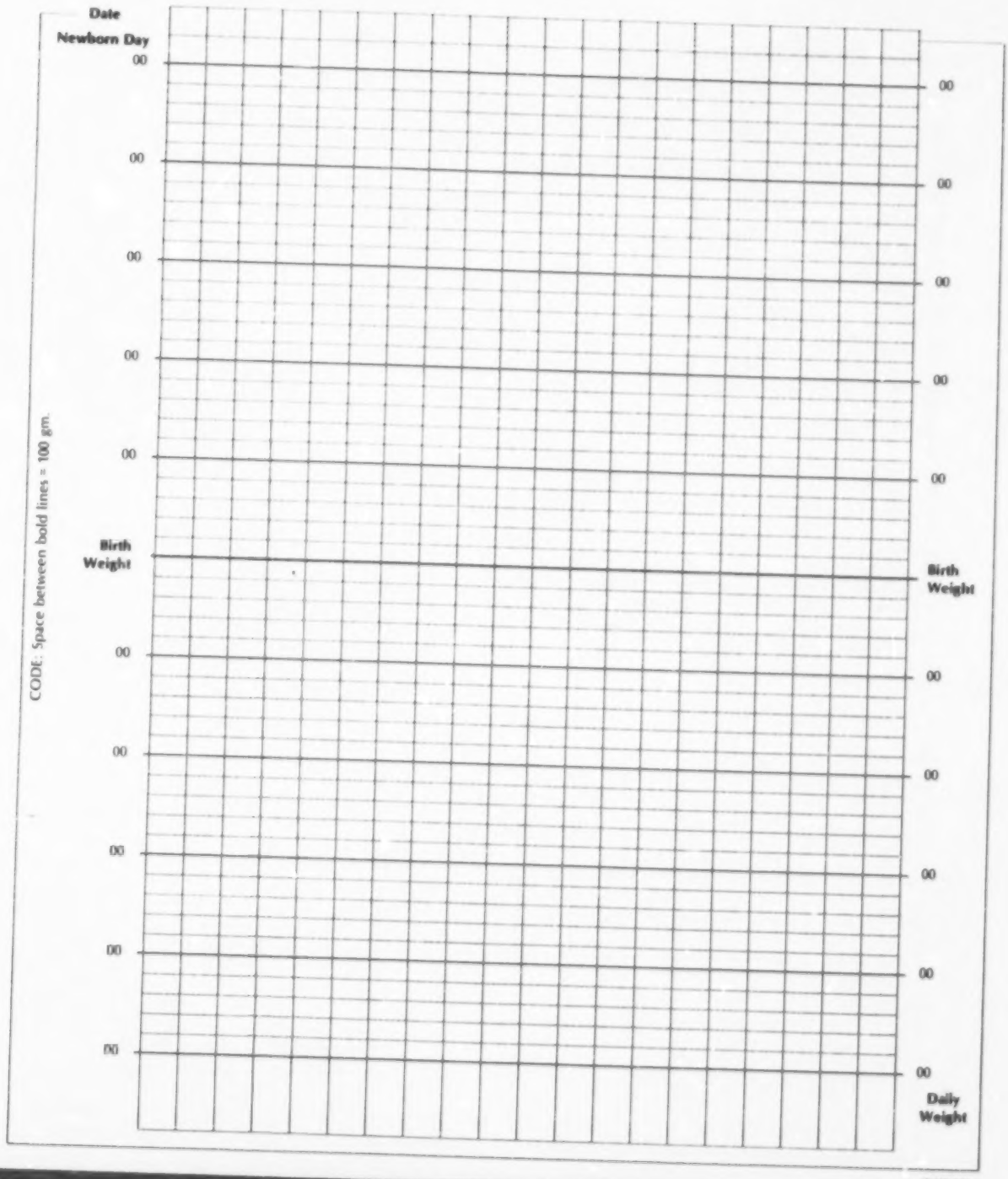
NEWBORN WEIGHT GRAPH



RCP/10

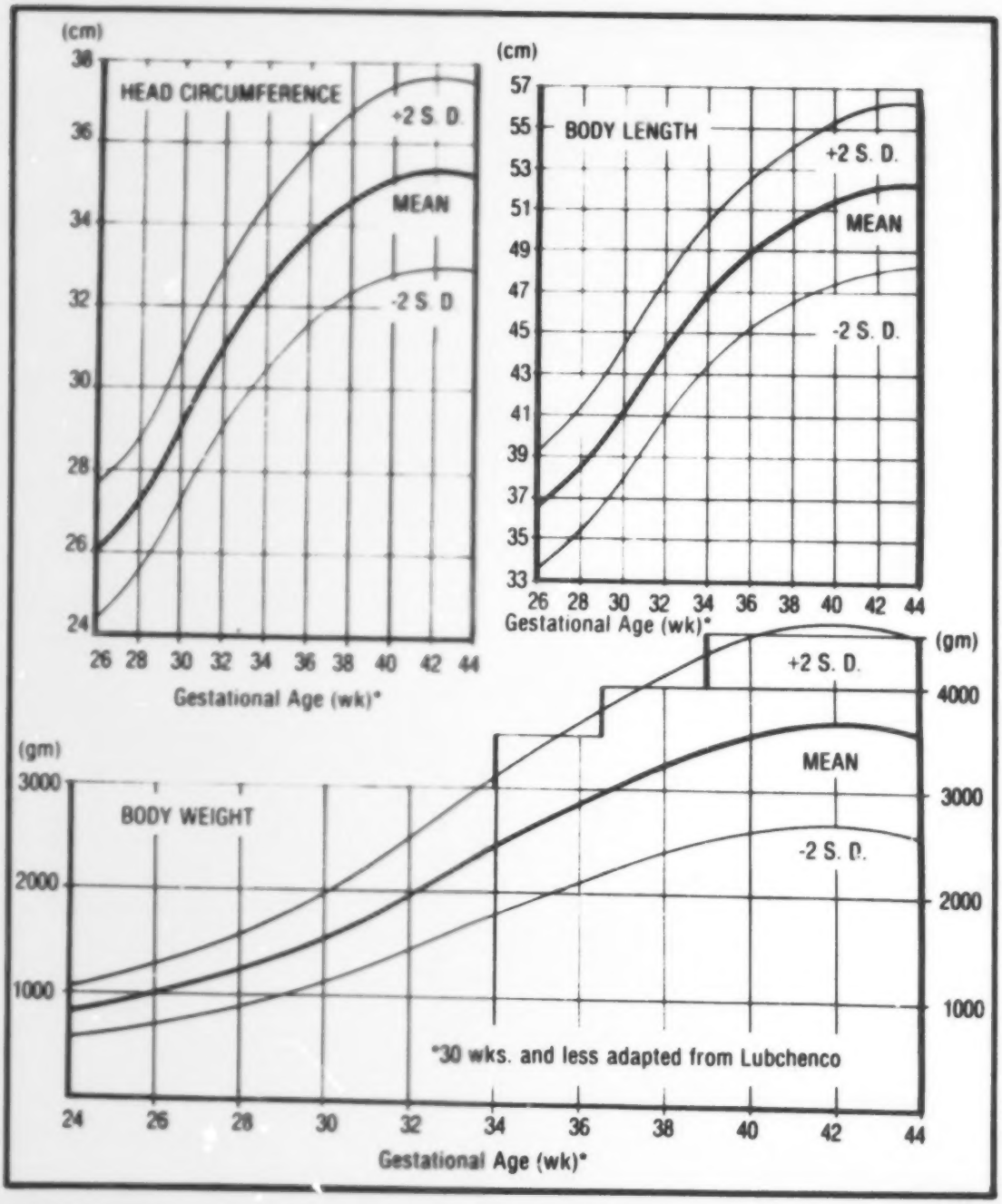
691000

NEWBORN NURSING NOTES

Newborn Day	Date	Time	Color	Tone	Urine	Stool	Feeding	Remarks

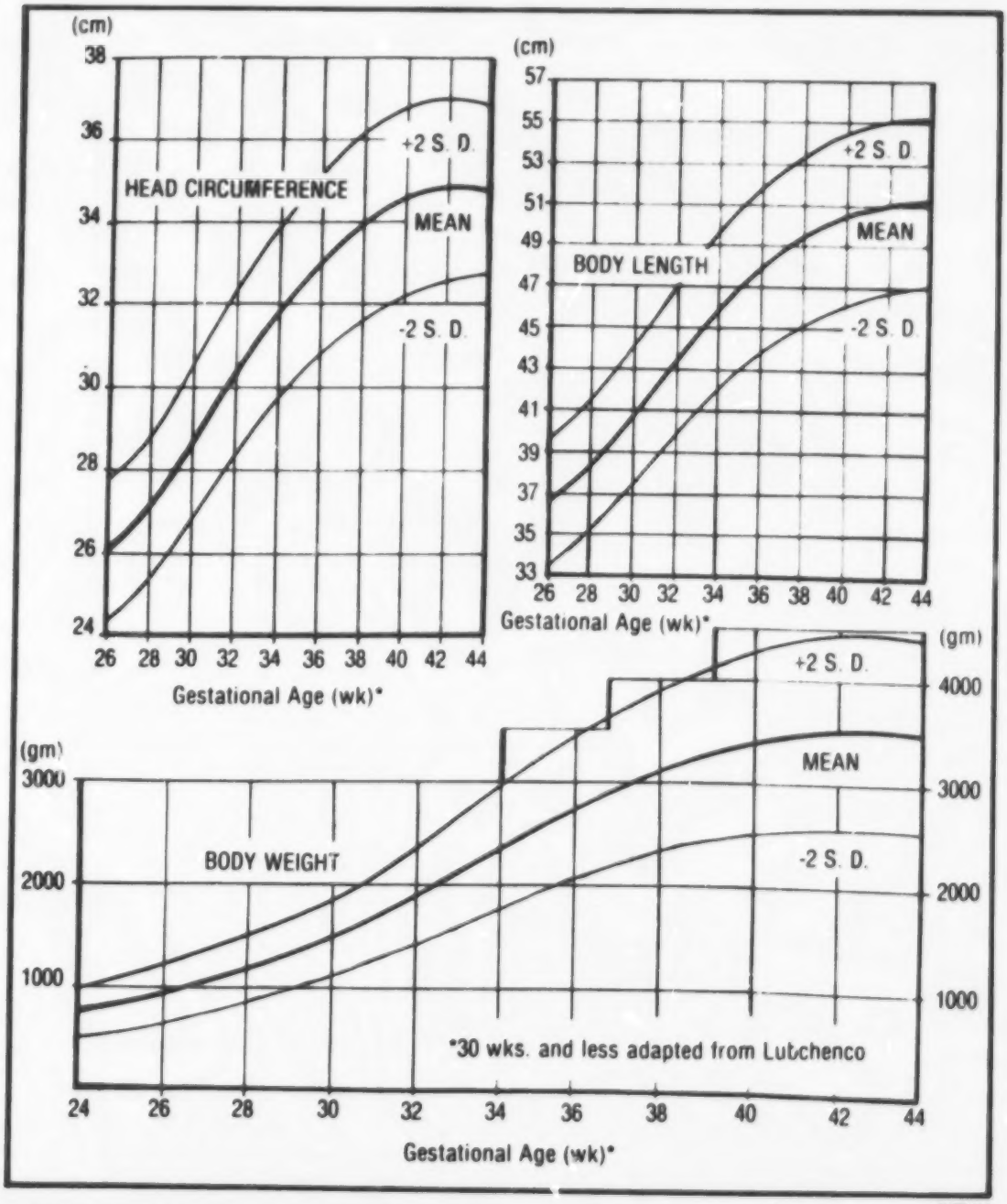
RCP/11

ATLANTIC
NEWBORN MALE GROWTH CHART



RCP/12

ATLANTIC
NEWBORN FEMALE GROWTH CHART



RCP/12

NEWFOUNDLAND AND LABRADOR
PRE-NATAL RECORD

HOSPITAL

NAME

ADDRESS

RELIGION TELEPHONE

D.O.B. AGE OCCUPATION ETHNIC GROUP

HUSBAND'S NAME AGE OCCUPATION

DOCTOR'S NAME

TOPICS FOR DISCUSSION

PRE-NATAL CLASSES
VITAMINS IRON
DIET AND WEIGHT
SMOKING
ALCOHOL
MEDICATIONS
CLOTHES
BOOKS
EXERCISE
REST
COITUS
BOWELS
BLOOD
GENETIC COUNSELLING
NOTE OF DATE OF QUICKENING
BREAST FEED
BREAST CARE
POSSIBILITY OF C.S.
HOSP. ADM. PROCEDURES
ANAES. AND ANALG.
LABOUR STAGES
BABY CARE
ACCOMMODATION

MENSTRUAL HISTORY

L.M.P. E.D.C.
CYCLE DURATION
NORMAL SURE ABNORMAL UNSURE

BIRTH CONTROL TYPE

NONE ☐ DATE DISCONTINUED

PREGNANCY TEST POSITIVE (DATE)

PREVIOUS PREGNANCIES INCLUDING ABORTIONS

DATE	PLACE	GEST.	HRS. OF LAB.	TYPE OF DEL.	COMPLICATIONS	B.W.	SEX	CONDITION OF BABY & PRESENT HEALTH

PAST ILLNESSES

RENAL ☐
CARDIAC ☐
DIABETES ☐
INFECTIONS ☐
RUBELLA ☐
V.D. ☐
OPERATIONS ☐
TRANSFUSIONS ☐
EPILEPSY ☐
OTHER ☐

CURRENT MEDICATIONS

ALLERGIES

HISTORY OF PRESENT PREGNANCY

VOMITING ☐
BLEEDING (WHEN) ☐
SMOKING ☐
ALCOHOL ☐
DRUG USE ☐
NUTRITION ☐
X-RAY ☐
OTHER ☐

FAMILY HISTORY

DIABETES ☐
CARDIAC ☐
HYPERTENSION ☐
T.B. ☐
TWINS ☐
GENETIC ☐
MALFORMATIONS ☐
OTHER ☐

EXAMINATION

GENERAL CONDITION WEIGHT ______ HEIGHT ______

HEAD AND NECK

CHEST

C.V.S.

BREASTS

ABDOMEN

EXTREMITIES (VARICOSITIES)

NEUROLOGICAL

PELVIC EXAMINATION

VULVA

VAGINA

CERVIX

UTERINE SIZE

ADNEXA

WHITE COPY: MOTHER'S HOSPITAL CHART **YELLOW COPY: PHYSICIAN'S COPY** **Please print firmly.**

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LABORATORY DATA

DATE	GEST	HB	COOMBS	ANTIBODIES

BL GP ______ Rh ______ HUSBAND'S Rh ______ RHOGAM GIVEN ______

VDRL ______

RUBELLA ______

PAP ______

MSU ______

OTHER INVESTIGATIONS (INCLUDE DATE) e.g. ULTRASOUND AMNIOCENTESIS G.T.T. ESTRIOL ESTIMATION

RISK FACTORS ANTICIPATED

PREGNANCY

LAB. AND DEL

NEWBORN

CONSULTATION

DATE

INITIAL RISK CATEGORY A B C N

FINAL RISK CATEGORY A B C N

*PLEASE REFER TO RISK GRADING GUIDE

SUMMARY

NAME AGE G P A L.M.P. E.D.C. QUICKENING

DATE	WGT PRE PREG.	B.P.	URINE ALB/SUG	EDEMA	DUR. WKS.	SIZE OF FUNDUS WKS. CM	PRES. POSITION	F.H.	RISK A/B/C N	REMARKS	RET. IN

CLINICAL ASSESSMENT OF PELVIS

HOSPITAL INFORMATION

BREAST FEEDING PRE-NATAL CLASSES PREP TYPE

ROOMING IN HUSBAND IN

SUMMARY OF DELIVERY

POST PARTUM VISIT

DATE

A GUIDE TO PREGNANCY RISK GRADING

The risk factors or problems listed below are intended as examples only and the list is not exclusive. This risk grading system is intended as a basis for planning ongoing management of the pregnancy

GRADE C Pregnancy at high risk

Pregnancies which are so complicated that the fetus and/or mother are obviously in danger. Wherever possible these patients should be transferred to a regional hospital for intensive care and delivery

DIABETES CLASS C, D, F, R, OR SIGNIFICANTLY COMPLICATED

RENAL DISEASE WITH HYPERTENSION + ↓ FUNCTION

PREMATURE RUPTURE OF MEMBRANES (+ SEPSIS)*

PROLONGED RUPTURE OF MEMBRANES MORE THAN 6 HOURS, ANTEPARTUM BLEEDING, CONTINUING OR REPEATED*

HYPERTENSION WITH SUPERIMPOSED TOXAEMIA

EARLY UNCONTROLLED PREMATURE LABOUR*

SEVERE FETAL GROWTH ARREST (< 10th Percentile)

HEART DISEASE, ESPECIALLY WITH FAILURE

SEVERE PREECLAMPSIA

*particularly 24 - 34 wks gestational age

GRADE B Pregnancy at risk

The fetus and or mother are definitely at risk and consultation should be obtained with a specialist obstetrician in your area. A plan of management will be suggested by him which may include collaborative care for the rest of the pregnancy with delivery usually in the regional hospital

DIABETES, CLASS A (GESTATIONAL) OR CLASS B

HYPERTENSION WITHOUT TOXAEMIA

APH, CEASED AND IN HOSPITAL

CERVICAL INCOMPETENCE

HYDRAMNIOS

POST-DATE PREGNANCY (42 weeks +)

HISTORY OF PRIOR STILL BIRTH OR NEONATAL DEATH

MATERNAL OBESITY

SIGNIFICANT TOBACCO, ALCOHOL, DRUG INTAKE

RHESUS IMMUNIZATION

RENAL DISEASE WITHOUT HYPERTENSION

MILD TOXAEMIA

CONTROLLED PREMATURE LABOUR

MULTIPLE PREGNANCY

BREECH PRESENTATION OR MALPRESENTATION

PRIMIGRAVIDA (age 15 and below, 35 and above)

HISTORY OF GENETIC OR METABOLIC DISEASE IN FAMILY (Genetic Amniocentesis or Counselling required)

ANAEMIA NOT RESPONDING TO IRON (< 10 gm)

WEIGHT GAIN < 10 LBS BY 30 WEEKS

PREVIOUS GROWTH RETARDATION, PREMATURE LABOUR, OR CAESAREAN SECTION

GRADE A Pregnancy at no predictable risk

NO PRIOR PERINATAL MORTALITY OR LOW BIRTHWEIGHT INFANT

NO SIGNIFICANT MEDICAL DISEASE

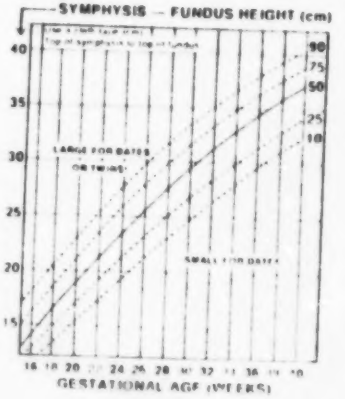
NO PREGNANCY COMPLICATIONS NOW OR IN THE PAST (Bleeding, Hypertension, Premature Labour)

FETAL GROWTH SEEMS ADEQUATE

GRADE N Newborn at risk

Delivery in a high risk center should be considered if there is reason to suspect probable neonatal problems based on past or family history

PREVIOUS SEVERE RDS, SEIZURE DISORDERS, HIRSCHSPRUNG'S DISEASE, CYSTIC FIBROSIS, CONGENITAL ANOMALIES



INSTRUCTIONS:

1. Each antenatal visit, measure the symphysis-fundus height (measured with a tape and refer to graph on the left)
2. At each antenatal visit insert your current assessment of pregnancy risk grading (A, B, C or N) in the appropriate column
3. Two or more minor risk problems can combine to produce a major pregnancy risk
4. Use this grading as the basis for continuing management of the pregnancy, e.g.
   C Consider transfer
   B Consider consultation

RAPPORT DU
GROUPE FÉDÉRAL DE TRAVAIL SUR LES GROSSESSES À RISQUE ÉLEVÉ
ET LES SYSTÈMES D'ENREGISTREMENT DES
DONNÉES PRÉNATALES

Also available in English under
the title "Report of the Federal
Task Force on High Risk Pregnancies
and Prenatal Record Systems"

RÉSUMÉ DES RECOMMANDATIONS DU GROUPE FÉDÉRAL DE TRAVAIL SUR LES GROSSESSES À RISQUE ÉLEVÉ ET LES SYSTÈMES D'ENREGISTREMENT DES DONNÉES PRÉNATALES

Avant-propos

Ce rapport n'est pas un énoncé de politique du gouvernement fédéral, mais représente une base de données pouvant servir à l'élaboration de politiques et de lignes de conduite futures. Il est à espérer que le présent rapport s'avérera un guide utile aux professionnels et para-professionnels qui dispensent des soins prénatals et périnataux aux futures mères.

RÉSUMÉ DES RECOMMANDATIONS DU GROUPE FÉDÉRAL DE TRAVAIL SUR LES GROSSESSES À RISQUE ÉLEVÉ ET LES SYSTÈMES D'ENREGISTREMENT DES DONNÉES PRÉNATALES

Voici les recommandations du Groupe fédéral de travail

RECOMMANDATIONS DE LA SECTION II

1. Chaque province au Canada doit être encouragée à mettre au point un dossier prénatal à l'usage des médecins qui dispensent des soins obstétricaux.

2. Les dossiers prénatals mis au point dans chaque province doivent être, autant que possible, uniformes quant à leur forme et à leur conception, et doivent inclure un moyen d'évaluer le risque chez la femme enceinte à l'aide des facteurs de prédiction du risque communément acceptés et décrits en détail dans le corps du présent rapport.

3. Des mesures doivent être prises pour que l'original du dossier prénatal soit inclus dans le dossier hospitalier de la mère et qu'un exemplaire soit inclus dans le dossier hospitalier néonatal, en plus de l'exemplaire qui se trouve au cabinet du médecin.

4. Les efforts que déploient les provinces pour mettre au point des programmes régionalisés de soins périnatals, et qui se traduisent par un triage des cas de grossesses à risque élevé selon les soins qu'ils nécessitent, sont louables et méritent d'être encouragés partout au Canada.

5. Bien que l'objectif premier du dossier prénatal soit de faciliter les soins dispensés par le médecin à la femme enceinte, il serait utile d'envisager, au cours de la constitution du dossier, l'inclusion de certains éléments d'information fondamentaux qui, enregistrés

et prélevés de manière uniforme, pourraient être utilisés pour l'extraction et l'analyse des données.

RECOMMANDATIONS DE LA SECTION III

6. Des études spécifiquement conçues pour la détermination de la validité du système de cotation du risque devraient être encouragées et appuyées.

7. L'évaluation du risque chez la femme enceinte s'étant avérée d'une valeur certaine, celle-ci devrait être universellement appliquée.

8. Des études contrôlées et conçues de façon appropriée devraient être entreprises pour déterminer l'effet, sur la grossesse, de la durée et de la nature de l'occupation de la femme enceinte.

9. Les répercussions, en termes de coûts tant pour la femme enceinte que pour la société, des diverses solutions relatives au travail des femmes pendant la grossesse devraient être évaluées.

10. Des études devraient être entreprises sur l'effet des substances toxiques dans le lieu de travail et leur effet sur la femme enceinte et sur son foetus.

11. Il faudrait entreprendre des études prospectives pour clarifier la relation existant entre un saignement précoce pendant la grossesse et l'issue de la grossesse, en mettant l'accent en particulier sur les anomalies congénitales.

12. Des études prospectives, bien contrôlées, ayant trait à l'effet du supplément nutritionnel et du régime alimentaire sur l'issue de la grossesse devraient être effectuées.

13. Un effort de recherche sérieux devrait être fait pour élucider la patho-physiologie de l'hypertension gravidique et sa relation avec des complications pour la mère.

14. Des études prospectives adéquatement contrôlées, portant sur les grossesses prolongées, doivent être entreprises avec une importance particulière accordée à la morbidité foetale et maternelle.

15. Le Groupe de travail recommande d'apporter une aide soutenue aux programmes de soins prénatals et d'accorder une importance particulière au dépistage des grossesses à risque.

16. Que l'on mette l'accent, de façon soutenue, sur l'humanisation du processus de l'accouchement, afin de maintenir et d'améliorer le niveau de satisfaction psychologique que cette expérience familiale devrait procurer. Cependant, le principe fondamental qui doit guider toute personne qui dispense des soins aux femmes enceintes doit sans cesse être le maintien et la protection du bien-être physique de la mère et de l'enfant.

17. Des études permettant d'obtenir l'information nécessaire à l'évaluation des effets potentiels à long terme de l'échographie sur le foetus doivent être entreprises de toute urgence.

18. Jusqu'à ce que de telle études aient été terminées, l'utilisation de l'échographie dans la grossesse, de façon automatique et sans indications spécifiques, doit être découragée.

19. Il est nécessaire d'établir des normes pour la formation des échographistes.

20. Des études prospectives, conçues de façon appropriée, portant sur le monitorage antepartum et intrapartum du coeur foetal doivent être entreprises, afin que l'on puisse établir la validité de certaines applications de cette technique.

21. Des essais doivent être conçus de façon à permettre de déterminer quels sont les effets secondaires des tocolytiques sur la mère et le foetus, et si une éventuelle amélioration de l'issue peut être attribuée à l'utilisation de ces agents.

22. Le transfert maternel-foetal doit, dans la mesure du possible, être préféré à celui du nouveau-né en difficulté.

23. Des programmes de transfert maternel, dans le cadre d'un système régionalisé, doivent être appliqués de façon uniforme à travers tout le Canada, de préférence au transfert du nouveau-né.

24. A cause d'effets à long terme potentiellement dangereux, les glucocorticostéroïdes utilisés dans la prévention de la détresse respiratoire chez le nouveau-né ne devraient être administrés que dans les cas où leurs avantages à court terme sont jugés essentiels.

25. Bien que le rôle de l'infirmière en soins obstétricaux soit reconnu dans plusieurs pays, il n'a pas encore été admis au Canada. Par conséquent, le Comité propose la constitution d'un groupe de travail national qui se pencherait sur cette importante question. Le "noyau" de ce groupe devrait comprendre des infirmières spécialisées en soins périnatals, ainsi que des pédiatres périnatologistes et des obstétriciens. D'autres représentants des professions médicale et infirmière devraient également en faire partie.

26. La morbidité néonatale doit être définie avec précision, et sa capacité à refléter la qualité et les effets des soins périnatals, déterminée et évaluée.

RECOMMANDATION DE LA SECTION IV

27. Le Groupe de travail recommande l'adoption, partout à travers le Canada, des définitions précédentes, pour une terminologie statistique maternelle et périnatale uniforme. Il est de plus recommandé que ces définitions soient transmises aux autorités fédérales et provinciales intéressées, pour un examen plus approfondi en vue de leur diffusion.

RECOMMANDATION DE LA SECTION V

28. Qu'un comité ad hoc de spécialistes en soins périnatals et prénatals soit constitué et chargé du suivi du rapport de la Commission canadienne pour l'Année internationale de l'enfant et de ce rapport du Groupe fédéral de travail. Il aurait pour objectif spécifique de s'assurer que les Canadiennes obtiennent la meilleure issue possible de la grossesse, telle qu'elle a été définie antérieurement.

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I. INTRODUCTION

A. HISTORIQUE

Au cours des dernières années, des progrès considérables ont été enregistrés dans le domaine des soins obstétricaux. Des connaissances et des techniques nouvelles ont permis de réduire progressivement la mortalité périnatale au Canada, dont les taux se situent actuellement parmi les meilleurs au monde. Il est évident cependant que les taux de mortalité ne doivent pas être les seuls critères sur lesquels une nation peut juger du succès de son programme de soins périnatals. En effet, les taux de morbidité et la satisfaction des bénéficiaires sont deux autres critères importants qui doivent être pris en considération si l'on veut optimaliser l'issue de ce qui est, pour la majorité de la population, une fonction naturelle et un événement heureux.

Le Groupe fédéral de travail sur les grossesses à risque élevé et les systèmes d'enregistrement des données prénatales a été constitué en février 1981 par la Direction des Services de santé et la Division des services et de promotion de la santé. Sa formation est l'aboutissement d'une série de mesures prises, en 1978, par l'Institut canadien pour la santé de l'enfant, en vue de tenter d'améliorer les résultats des soins périnatals au Canada. Au cours de cette même année, d'autres études ont été entreprises, dont le résultat de l'une d'elles a donné lieu à la formation de la Coalition canadienne pour la prévention des handicaps à l'aide d'une amélioration des soins prénatals. Parmi d'autres résultats figurent l'élaboration de principes directeurs et la préparation d'un ouvrage intitulé la "Priorité des priorités"[1] dont des exemplaires ont été envoyés à tous les ministres provinciaux et à leurs adjoints, ainsi qu'au ministre fédéral de la Santé et du Bien-être social.

En 1979, le rapport de la Commission canadienne pour l'Année internationale de l'enfant recommandait que les gouvernements "adoptent une politique faisant de la santé de la mère et de l'enfant une priorité pour les cinq prochaines années"(2).

En 1980, dans une lettre adressée au docteur William Cochrane, F.R.C.P.(C), président du conseil d'administration de l'Institut canadien pour la santé de l'enfant, et dans laquelle elle louait le rôle joué par l'Institut dans l'amélioration des soins périnatals, Madame Monique Bégin, ministre de la Santé nationale et du Bien-être social, suggérait la poursuite des discussions engagées avec son Ministère en vue de planifier et de mettre en place un programme coordonné.

Ces discussions ont donné lieu à la formation, en 1981, du présent Groupe de travail. Tel que l'énonçait le docteur M.M. Law, F.R.C.P.(C), sous-ministre adjoint, Division des services et de promotion de la santé, Santé et Bien-être social Canada, le mandat du Groupe comporte ce qui suit:

1. Examiner, développer et élaborer un ensemble de lignes directrices qui permettraient d'identifier divers états relatifs à la santé de la mère, afin d'aider les professionnels de la santé à dépister les cas de grossesse à risque élevé.

2. Mettre au point un système d'enregistrement des données prénatales susceptible d'être utilisé et mis en application par toutes les provinces.

B. PARTICIPANTS

Les personnes suivantes faisaient partie du Groupe de travail:

Dr. Jack H. Walters, Président	Dr. Thomas Martin
Dr. Graham Chance	Dr. John Milligan
Dr. James Dunne	Dr. Ruth Milner
Dr. Martine Gagnon	Dr. Ian Morrison

Dr. Emily Hamilton
Dr. Karen Kaufman
Mme Joyce (MacDonald) Kaye
Dr. Bernard Leduc
Dr. Robert H. Lennox
Dr. T. MacLahlan
Dr. Leo Peddle
Mme Shirley Post
Dr. Donald Rae
Dr. D. Smith
Dr. H. Stewart

Le Groupe de travail a bénéficié des commentaires précieux des conseillers en épidémiologie et des médecins-conseils dont on trouvera les noms à l'Annexe 2. Le présent rapport a été préparé par les membres de ce comité, formé de professionnels de la santé et de chercheurs ayant une compétence et un intérêt particuliers dans les soins périnatals. Ce rapport est donc soumis au gouvernement mais n'a pas été préparé par lui. Nous tenons à mentionner l'aide précieuse que nous ont apportée le Docteur Lennox et le personnel de son secrétariat dans la préparation des réunions, la transcription et la traduction des procès-verbaux et des nombreux documents du Groupe de travail, ainsi que dans la préparation et l'impression de ce rapport final. Ce document est destiné à l'usage des professionnels de la santé qui dispensent des soins aux femmes enceintes et à leurs nouveau-nés. On prévoit également de le distribuer à tous les niveaux de gouvernement, aux responsables de la planification des services de santé qui ont besoin de principes directeurs et de définitions normalisées pour la mise au point de systèmes améliorés de soins périnatals.

C. PRÉAMBULE

Le concept de soins périnatals a considérablement évolué, depuis le temps où n'existaient pour ce type de soins aucune définition uniformément acceptée et aucune unité spécialisée, jusqu'au développement du concept internationalement admis de grossesse à risque élevé, et la mise sur pied, à l'aide de programmes régionalisés, d'unités de soins périnatals pour les femmes enceintes "à risque élevé" et pour leurs nouveau-nés.

Dans le choix des publications et des citations qui figurent dans la bibliographie de ce rapport, nous nous sommes limités aux écrits concernant les grossesses à risque élevé qui ont été publiés ces 10 dernières années. Cette bibliographie, qui ne représente qu'une fraction des nombreuses publications traitant de cet important domaine, comporte 368 publications qui ont été passées en revue par le Docteur Ruth Milner et son équipe.

D. OBJECTIFS DU GROUPE DE TRAVAIL

Les objectifs particuliers du Groupe de travail ont été exposés dans les différentes séquences de l'historique ci-dessus. Certaines provinces ont déjà établi des systèmes dont l'objectif est la réduction de la morbidité et de la mortalité périnatales. Elles ont mis sur pied des systèmes d'enregistrement des données, prévu des moyens d'intervention, formé le personnel et mis en place les installations nécessaires pour atteindre cet objectif. Le Groupe de travail a étudié la possibilité de mettre au point un ensemble de définitions uniformes pour tout le Canada, ainsi qu'un ensemble de "marqueurs essentiels" dont chaque province devra tenir compte lors de la modification de son système actuel d'enregistrement des données prénatales, s'il existe le besoin.

Les conclusions et les recommandations du Groupe de travail qui suivent ne prétendent aucunement imposer un modèle unique de dossier prénatal, ou un mode uniforme de traitement ou encore un système de soins de santé pour les femmes enceintes dans quelque province que ce soit. Elles visent à établir des normes permettant de comparer des situations, des modes de traitement et des résultats analogues dans le domaine périnatal. C'est seulement avec la collaboration des membres des associations professionnelles et des responsables des systèmes des soins de santé fédéral et provinciaux que l'on parviendra à des améliorations. En tant que groupe de professionnels intéressés à cette question, nous demandons avec insistance qu'au

cours des prochaines années l'on accorde aux soins périnatals, à tous les niveaux, la priorité qu'ils méritent. Nous espérons que le présent rapport contribuera à cette évolution.

E. MÉTHODE D'ÉTUDE

Pour cette étude, les trois principales tâches du Groupe de travail ont été assignées à trois sous-comités distincts à qui l'on a demandé de faire une revue des publications et de préparer un rapport qui pourrait être étudié et approuvé par le Groupe de travail.

Le sous-comité chargé d'étudier les dossiers prénatals, présidé par le Docteur I. Morrison, a rédigé un rapport dont le résumé se trouve à la Section II et la version intégrale à l'Annexe 3.

Le second sous-comité, sous la présidence du Docteur B. Leduc et du Docteur J. Milligan, s'est vu assigner la tâche plus difficile de définir les grossesses à risque élevé. Après leur première réunion, les membres de ce sous-comité se sont réunis avec l'ensemble du comité, et la motion suivante a été adoptée; elle témoigne de notre préoccupation quant à certains aspects essentiels des soins actuels:

"Etant donné la préoccupation des professionnels des soins de la santé et du public en général quant à l'incidence apparemment élevée des grossesses à risque élevé, il est proposé que soit évaluée la validité des facteurs utilisés dans la pratique courante pour prédire les issues défavorables des grossesses viables, ainsi que la base sur laquelle les issues de ces grossesses sont identifiées."

Le Docteur Ruth Milner accepte de se joindre au Groupe de travail pour apporter la compétence et la supervision nécessaires à ces évaluations.

Le sous-comité chargé des définitions, qui était présidé par le Docteur Leo Peddle, a rédigé la section incluse dans le rapport sous le titre "Terminologie maternelle et périnatale uniforme". Cette section a été transmise au Comité national sur la terminologie périnatale, qui a été récemment constitué et qui compte des représentants de Statistiques Canada et de ce Groupe de travail, afin qu'il l'utilise comme base pour l'élaboration d'un ensemble de définitions uniformes, qui seraient acceptables à la fois par les registraires provinciaux et les autorités fédérales.

II. LES DOSSIERS PRÉNATALS

A. CONTENU DU DOSSIER PRÉNATAL

Dans les antécédents médicaux et sociaux de la femme enceinte, et dans les résultats des examens physiques et des épreuves de laboratoire, certains "marqueurs" ou "facteurs" peuvent indiquer l'existence de problèmes potentiels pour la mère ou l'enfant. Ces "marqueurs" peuvent être identifiés à un stade précoce de la grossesse ou se développer n'importe quand au cours de la grossesse, et même jusqu'au début du travail et de l'accouchement.

Dans le cadre du traitement de la femme enceinte qui reçoit des soins prénatals, les facteurs choisis et évalués par les omnipraticiens, les obstétriciens et les infirmières peuvent être enregistrés sur des formules particulièrement conçues à cet effet, appelées dossiers prénatals. Ces dossiers sont utilisés par les membres de l'équipe des soins de la santé pour documenter les soins qu'ils dispensent aux femmes enceintes. En général, leur forme permet de les identifier facilement en tant que dossiers distincts, à utiliser particulièrement dans les cabinets des médecins, les cliniques et le service des archives hospitalières.

L'historique du développement du dossier prénatal au cours des cinquante dernières années, et la complexité croissante de son contenu, reflètent assez bien le développement de la spécialité de périnatologie elle-même. À mesure que l'on progressait dans la connaissance des techniques de dépistage et de traitement des principales complications obstétricales et néonatales, on parvenait à réduire les taux internationaux de mortalité périnatale et maternelle. Jusqu'à un certain point, cette réduction s'est accompagnée d'une baisse de la morbidité dans les mêmes situations de risques. Cependant, à mesure que les résultats se sont améliorés, la mortalité d'origine périnatale s'est approchée de son niveau

"irréductible" et, de nos jours, c'est la réduction de la morbidité périnatale qui doit être considérée comme un objectif primordial des soins obstétricaux.

B. UNIFORMISATION DU DOSSIER PRÉNATAL

Afin d'améliorer l'identification des grossesses à risque et de fournir des principes directeurs normalisés à l'équipe des soins de la santé qui documente les nombreux facteurs évalués pendant la période prénatale pour toutes les mères enceintes, des groupes de professionnels de la santé ont conçu des dossiers prénatals assez complets. Initialement ces dossiers étaient utilisés uniquement pour les patientes sur pied, dans les cabinets des médecins et les cliniques mais, petit à petit, les hôpitaux, les villes, les régions, et par la suite les provinces, ont conçu des dossiers prénatals uniformisés. Au cours de cette évolution, les dossiers prénatals ont été soumis à plusieurs essais par leurs usagers. Voici, en général, les changements qui y ont été apportés:

1. Le format du dossier est devenu plus standardisé.
2. Des sections spécifiques ont été prévues pour certains éléments d'information (tels que les antécédents obstétricaux ou la date des dernières règles).
3. D'autres sections ont été réservées à des renseignements de post-observation ou de traitement (e.g. poids, pression sanguine, santé du foetus).
4. Certains éléments ou facteurs identifiés comme nécessaires au traitement prénatal ont été inclus (e.g. groupe sanguin, type Rhesus et anticorps, titrage de la rubéole).
5. De nouveaux résultats de recherche, appliqués au dépistage et à l'identification de risques particuliers ont été incorporés au dossier prénatal (e.g. mesure de la hauteur utérine, échographie).

Des sections destinées à l'enregistrement de la cytologie cervicale et à celui d'antécédents personnels, médicaux, familiaux ou sociaux font actuellement partie intégrante du dossier prénatal. En même temps que se développait la formule de ce dossier, le principe selon lequel certaines grossesses devaient bénéficier de soins particuliers était de plus en plus admis et accepté.

C. INCLUSION DU DOSSIER PRÉNATAL DANS LES DOSSIERS HOSPITALIERS

À mesure que s'améliorait l'acquisition des données prénatales et que l'on connaissait mieux la répercussion des événements prénatals sur les résultats postnatals, on a pu évaluer l'importance du dossier prénatal pour le traitement de la mère et de l'enfant, et le rôle qu'il joue dans la transmission de l'information vers la salle de travail, la salle d'accouchement et les services postnatals de l'hôpital dans lequel l'accouchement a lieu.

Au début, on pensait qu'on avait besoin uniquement du groupe sanguin, du type Rhesus et du rapport de sérologie. Par la suite, l'équipe périnatale s'est rendu compte que la pression sanguine, le gain pondéral total, l'hémoglobine, les examens et traitements subis pendant la période prénatale, ainsi que d'autres renseignements, étaient tout aussi nécessaires. En conséquence, il est d'usage actuellement d'établir le dossier en plusieurs exemplaires. Dans la plupart des cas, un exemplaire est envoyé à l'hôpital, l'original étant gardé au cabinet du médecin ou à la clinique. Dans certaines provinces, un exemplaire est envoyé au dossier néonatal. Dans un grand nombre d'hôpitaux au Canada, les règlements obligent tous les praticiens de transmettre à l'hôpital, pour chaque patiente admise pour accouchement, une copie du dossier prénatal. La plupart des provinces ont maintenant des dossiers prénatals standardisés à cette fin.

Recommandation #1. Chaque province doit être encouragée à mettre au point un dossier prénatal à l'usage des médecins dispensant des soins obstétricaux.

Recommandation #2. Les dossiers prénatals mis au point dans chaque province doivent être, autant que possible, uniformes quant à leur forme et à leur conception, et doivent inclure un moyen d'évaluer le risque chez la femme enceinte à l'aide des facteurs de prédiction du risque communément acceptés et décrits en détail dans le corps du présent rapport.

Recommandation #3. Des mesures doivent être prises pour que l'original du dossier prénatal soit inclus dans le dossier hospitalier de la mère et qu'un exemplaire soit inclus dans le dossier hospitalier néonatal, en plus de l'exemplaire qui se trouve au cabinet du médecin.

On trouvera à l'Annexe 3 un exposé plus détaillé du contenu, de la forme et des objectifs du dossier prénatal.

D. PROGRAMMES DE SOINS PÉRINATALS

La diminution spectaculaire de la mortalité maternelle et périnatale et la diminution concomitante de la morbidité, tant chez les mères que chez leur nouveau-nés pendant ces quinze dernières années au Canada ne sont pas uniquement attribuables à l'amélioration de l'habitation, de l'alimentation ou du transport. Elles sont également dues au fait que l'on sait maintenant qu'un certain pourcentage des femmes enceintes, probablement moins de 25 p. cent, présentent des risques plus élevés, à cause peut-être de problèmes non identifiés qui nécessitent des soins particuliers. Au cours de ces quinze dernières années, ces patientes "à risque" ont été identifiées, mieux traitées, et les taux de morbidité et de mortalité périnatales ont été réduits chez ce groupe grâce aux différentes interventions des équipes de soins de la santé.

Une partie importante de cette amélioration est imputable au fait que l'on a mis au courant les futures mères que leur grossesse présentait des risques et que l'on pouvait en améliorer l'issue pour la plupart d'entre elles.

L'amélioration progressive reflétée dans les statistiques périnatales dans toutes les régions du Canada atteste de l'efficacité de ces programmes.

Pendant cette même période le système des soins de santé a été modifié de façon à rendre ces soins particuliers accessibles aux mères qui en avaient besoin. Des dispositions ont été prises, sur une base régionale, pour fournir des équipes de personnel particulièrement formées à donner des soins à la femme enceinte identifiée "à risque élevé", ainsi qu'à son foetus ou à son nouveau-né. Ces équipes travaillent dans des unités périnatales spécialement conçues et équipées à cette fin. Ce sont des centres où se donnent les cours prénatals régionaux et qui reçoivent les femmes dont les grossesses sont compliquées. Avec les autres institutions et professionnels de la région, ces unités servent de centres ressources fournissant la compétence nécessaire à l'obtention de soins plus efficaces. Ce phénomène de "régionalisation des soins médicaux" est déjà bien établi dans le cas d'autres problèmes médicaux particuliers tels que le cancer, le trauma, la dialyse rénale et la génétique. Il a été prouvé que, dans le cas de ces états médicaux particuliers, cette formule permet une accessibilité plus équitable à des programmes coûteux et une nette amélioration des résultats.

Recommandation #4. Les efforts que déploient les provinces pour mettre au point des programmes régionalisés de soins périnatals, et qui se traduisent par un triage des cas de grossesses à risque élevé selon les soins qu'ils nécessitent, sont louables et méritent d'être encouragés partout au Canada.

Dans le petit nombre de cas où il y a décès de la mère ou de l'enfant ou encore une invalidité permanente chez la mère ou l'enfant, l'angoisse et la souffrance peuvent être intenses et durables. De plus, le coût des soins continus que l'on doit prodiguer aux nourrissons ou aux enfants atteints de lésions constitue pour de

longues années un fardeau financier tant pour la famille que pour la société. Donc, réduire encore plus la morbidité et la mortalité chez les rejetons des femmes identifiées comme étant à risque serait à l'avantage de toute la société. Pour atteindre cet objectif, il faudrait cependant mieux comprendre les facteurs de causalité, dont un grand nombre sont d'origine prénatale. Ce qui importe dans l'évaluation à long terme des facteurs à risque, est le lien qu'on retrouve dans le dossier des données sociales, économiques et éducationnelles de la femme et de son partenaire.

Recommandation #5. Bien que l'objectif premier du dossier prénatal soit de faciliter les soins dispensés par le médecin à la femme enceinte, il serait utile d'envisager, au cours de la conception du dossier, l'inclusion de certains éléments d'information fondamentaux qui, enregistrés et prélevés de manière uniforme, pourraient être utilisés pour l'extraction et l'analyse des données.

E. DÉFINITIONS DE LA GROSSESSE À RISQUE

Le Groupe de travail a convenu unanimement que la définition de la grossesse à risque dépendait de la somme totale des marqueurs dont chacun individuellement est associé à un risque accru pendant la grossesse. Trois groupes de marqueurs ont été identifiés par le Groupe de travail:

a) Les marqueurs du risque
Ce sont des facteurs acceptés et couramment utilisés dans la pratique clinique comme indicateurs d'un certain degré de risque accru dans toute grossesse. Exemple: le diabète chez la mère.

b) Les marqueurs de l'issue
Ce sont des événements défavorables que l'on peut identifier et qui sont valables comme marqueurs communs, au moins pour la

grossesse en cours. Exemple: une sepsie chez la mère ou une hémorragie intraventriculaire.

c) Les marqueurs de l'intervention

Ce sont des techniques ou des facteurs qui influent de façon positive ou négative sur le traitement ou l'issue de la grossesse. Exemple: la mesure du ratio lecithine-sphingomyéline dans le liquide amniotique, en tant qu'élément de prédiction de la maturité pulmonaire.

En se basant sur l'expérience clinique commune, le Comité a énuméré une série de facteurs susceptibles d'influer sur la santé de la femme enceinte, de son foetus ou de son nouveau-né. Ces facteurs sont classés dans les catégories suivantes d'après leur priorité, en vue de l'évaluation méthodologique des publications qui s'y rapportent:

1. Facteurs qui sont si bien identifiés ou si évidents qu'aucune recherche ou évaluation statistique supplémentaire n'est nécessaire pour attester de leur validité comme marqueurs (faible priorité pour l'étude).

2. Facteurs dont la validité comme marqueur d'une grossesse à risque élevé reste à établir et constitue une grande priorité.

La répartition par catégorie des marqueurs du risque, des marqueurs de l'issue et des marqueurs de l'intervention, se présente comme suit:

a) Marqueurs du risque

1 (Valeur évidente)

1) faible poids de naissance du nourrisson
2) habitude de la cigarette
3) décès néonatals ou foetaux antérieurs
4) drogue (non médicamenteuse)
5) troubles médicaux
6) anticorps (Rh, rubéole, etc.)
7) ingestion d'alcool
8) diabète gravidique
9) absence de soins prénatals
10) grossesse multiple
11) rupture prématurée des membranes
12) prématurité
13) position anormale du foetus
14) présentation vicieuse du foetus
15) étendue de l'anesthésie et réanimation
16) échantillon sanguin prélevé sur le cuir chevelu du foetus

2 (Validité à établir)

1) première expérience de soins prénatals
2) infection des voies urinaires
3) antécédent d'avortement thérapeutique
4) poids avant la grossesse
5) taille avant la grossesse
6) statut socio-économique
7) alimentation
8) alpha-1-foeto-protéine
9) âge - moins de 20 ans
   - plus de 35 ans
10) occupation - celle de la mère (pas particulièrement celle du père)
11) validité du dossier standard utilisé
12) validité de la formule utilisée pour le dépistage du risque
13) saignements
14) hypertension (mesurée deux fois à 20 minutes d'intervalle)
15) grossesse dépassant 42 semaines
16) étiquetage de la femme enceinte comme étant "à risque élevé"
17) dépistage au moyen d'un test sans stress
18) assistance à des cours prénatals
19) lieu de l'accouchement (à la maison ou à l'hôpital)
20) dimensions de l'hôpital (faisant partie ou non du réseau hospitalier régional)

b) Marqueurs de l'issue

1) (Valeur évidente)

1) syndrome de détresse respiratoire (maladie des membranes hyalines)
2) hémorragie intraventriculaire
3) sepsie
4) anomalie génétique et anomalie du développement
5) dysplasie broncho-pulmonaire

2 (Validité à établir)

1) anémie
2) bilirubine
3) fractures
4) retard de croissance intra-utérine
5) crises épileptiques
6) infirmité motrice cérébrale
7) arriération mentale
8) anomalie de la décharge neuronique
9) indice d'Apgar (<7 à 5 minutes)
10) acidose métabolique (pH du cordon ombilical < 7,2).

c) Marqueurs de l'intervention

1) (Valeur évidente)

1) transfert spécialisé du nouveau né
2) transfert maternel-foetal

2 (Validité à établir)

1) identité de la personne qui effectue l'accouchement (omnipraticien, obstétricien ou sage-femme)
2) transfert de la mère et de l'enfant contre le transfert néonatal
3) repos au lit
4) méthode d'accouchement (césarienne, forceps)
5) déclenchement du travail
6) glucocorticostéroïdes
7) agents tocolytiques

Des fonds ont été mis à la disposition du Docteur Milner et de son équipe pour un projet de recherche visant à réexaminer la liste des marqueurs ci-dessus qui ont été discutés et catégorisés par les membres du Groupe de travail. L'objectif du projet était, d'une part, l'analyse de la validité de la méthodologie scientifique utilisée dans l'évaluation des rapports publiés sur l'étude de ces marqueurs et, d'autre part, l'exploration des domaines où leur utilisation n'a pas été optimale.

La section traitant de la méthodologie décrit les méthodes d'analyse rigoureuses utilisées par le Docteur Milner et son groupe. La section intitulée "Les variables de l'intervention et de l'issue" rend compte du résultat de ces analyses. Celles-ci ont d'ailleurs servi de base aux commentaires et recommandations du Groupe de travail concernant les secteurs qui devraient faire l'objet d'une étude et d'un développement plus poussés.

III. ÉVALUATION DES VARIABLES DE PRÉDICTION , DE L'INTERVENTION ET DE L'ISSUE

INTRODUCTION

La grossesse est un processus naturel. Cependant des complications peuvent se développer au cours de cette période et constituer des risques pour la mère et l'enfant. Le processus naturel de la reproduction assure la survie de l'espèce, mais, sur une base individuelle, rien ne garantit une grossesse sans problèmes ou un nouveau-né en bonne santé. Le but des soins périnatals modernes est d'augmenter au maximum les chances pour l'enfant d'une naissance parfaitement saine et, en même temps, de réduire au minimum le risque pour la mère.

Pour prévenir efficacement les problèmes, le dépistage du risque doit être prospectif. L'identification des facteurs de prédiction, pour sa part, est largement fondée sur l'évaluation rétrospective. Certaines complications de la grossesse peuvent être immédiates ou imprévisibles, par exemple la rupture prématurée des membranes à 27 semaines, ou un prolapsus du cordon ombilical survenant dans une grossesse par ailleurs d'apparence saine. Par contre, un événement passé, comme la rupture prématurée des membranes à 27 semaines dans une grossesse antérieure, indique un potentiel de risque dans la grossesse en cours, même si chez la majorité des femmes de cette catégorie, la grossesse aura une issue heureuse.

La présent Groupe de travail a examiné des facteurs que l'on croit être reliés à un risque plus élevé d'issue défavorable et qui peuvent attirer l'attention du médecin sur des problèmes potentiels ou réels. Certains de ces facteurs ne prêtent pas à controverse et ont été simplement énumérés (Section B). D'autres, qui sont mentionnés dans les publications comme ayant une certaine valeur de prédiction ou comme étant des interventions appropriées, sont controversés; ceux-là ont été examinés attentivement quant à leur valeur épidémiologique pour prédire les troubles ou pour inciter à des interventions considérées bénéfiques pour le traitement de la patiente (Sections C et D).

A. MÉTHODOLOGIE ÉPIDÉMIOLOGIQUE

Les critères dont on s'est servi pour évaluer la qualité de la preuve sont ceux qui ont été utilisés par le Groupe canadien de travail sur l'examen périodique de la santé[3].

Les trois aspects suivants ont été examinés:

- le poids de souffrance potentielle qu'entraînerait un risque donné;
- la validité et l'acceptabilité des moyens utilisés pour identifier ce risque;
- l'efficacité de l'intervention qui en résulte.

Seuls les deux derniers aspects ont fait l'objet d'un examen approfondi.

Pour obtenir les publications appropriées, une recherche documentaire couvrant les deux années antérieures a été entreprise pour chaque marqueur du risque ou de l'intervention, et des collègues nous ont fourni des articles récents. À partir des bibliographies qui accompagnent ces derniers, d'autres références ont été choisies et une nouvelle bilbiographie a été ainsi rassemblée autour de chaque marqueur. Il a été convenu de ne pas examiner les publications antérieures à 1975, les preuves récentes ayant semblé plus valables. Dans certains cas, assez rares, la recherche est remontée plus loin, soit parce que les meilleurs articles avaient été publiés plus tôt et reflétaient toujours la réalité actuelle, soit parce qu'il y avait pénurie d'articles récents.

Pour évaluer la qualité de la preuve contenue dans ces articles, nous nous sommes servis des critères d'évaluation des tests diagnostiques et des critères d'évaluation de l'efficacité des interventions cités dans une série d'articles d'évaluation critique parus dans le

Canadian Medical Association Journal en 1981 sous le titre de Clinical Epidemiology Rounds[4]. Nous avons essayé de couvrir aussi complètement que possible les trois aspects mentionnés plus haut, mais le manque de temps, de données et de références appropriées nous a empêchés de le faire de façon complète, surtout en ce qui a trait au poids actuel de souffrance.

On trouvera un exemple d'application des méthodes d'évaluation des publications dans la revue des publications sur le monitorage foetal intrapartum, Annexe 4.

B. FACTEURS DE PRÉDICTION DU RISQUE GÉNÉRALEMENT ACCEPTÉS

1. Les antécédents obstétricaux

Les antécédents obstétricaux ont une valeur de prédiction élevée pour la grossesse en cours; malheureusement, dans le cas des nullipares cette donnée n'existe pas et, même chez les multipares, elle n'a pas une valeur absolue de prédiction. Parmi les antécédents obstétricaux, on compte:

Les enfants de faible poids à la naissance (<2,5 kg)
Les morts périnatales
Les avortements répétés (3 ou plus consécutifs)
Les lésions à la naissance
Les anomalies congénitales
Les maladies génétiques
Une grande multiparité.
Une césarienne antérieure

2. Les facteurs médicaux maternels

Connaître ces facteurs est important, étant donné qu'une intervention appropriée réussira à réduire au minimum les complications. Ces facteurs sont:

Des troubles médicaux pendant la grossesse (e.g. le diabète, l'hypertension, etc.)

L'iso-immunisation

Des antécédents familiaux de maladie génétique

L'âge de la mère (≤16 ans, ou ≥35 ans)

La sensibilité au test de la rubéole

Une anomalie ou une intervention chirurgicale dans l'utérus

3. Les facteurs socio-économiques

Certains facteurs socio-économiques et culturels très défavorables ont un effet négatif sur la grossesse. Ce sont:

La pauvreté et la famine

L'absence de soins prénatals

L'alcoolisme

L'abus de la cigarette

L'abus des médicaments

4. Les facteurs maternels et foetaux survenus en cours de grossesse

Ces facteurs confirment l'importance de soins précoces et continus pour le dépistage, l'évaluation et le traitement de troubles potentiels ou réels, survenus en cours de grossesse.

Grossesse multiple

Retard de croissance intra-utérine

Infection intercurrente (e.g. rubéole, herpès, toxoplasmose, syphilis)

Maladie foetale (e.g. anasarque foeto-placentaire, maladie génétique, anomalie congénitale)

Polyhydramnios

Olygohydramnios

Maladie de la mère (e.g. hypertension gravidique, diabète gravidique, anémie)
Saignement antepartum
Iso-immunisation

5. Les facteurs reliés au travail et à l'accouchement

Des facteurs de risque, déjà identifiés, peuvent être encore présents au début du travail. En outre, d'autres complications non prévues peuvent survenir au cours du travail et de l'accouchement. Ces complications peuvent être reliées à des problèmes majeurs et nécessiter des soins immédiats. Ce sont:

L'accouchement avant terme
La rupture prématurée des membranes
Un travail prolongé
Une présentation ou une position vicieuses
Un prolapsus du cordon
Une naissance traumatique
Le passage du méconium
L'asphyxie au cours de l'accouchement
Des saignements au cours de l'accouchement
L'asphyxie néonatale
Des anomalies congénitales interférant avec l'adaptation physiologique du nouveau-né (e.g. une hernie diaphragmatique)

C. FACTEURS DE PRÉDICTION CONTROVERSÉS

1. La cotation du risque est le poids numérique accordé à chaque facteur de risque ou à plusieurs facteurs combinés; dans ce dernier cas, on additionne les poids individuels pour obtenir une cote cumulative.

L'évaluation du risque est l'évaluation clinique de la signification de chaque facteur de risque.

Il a été signalé que la cotation du risque avait une corrélation avec l'issue périnatale. Cependant, lorsqu'elle a été soumise à une analyse épidémiologique stricte, la validité de ces corrélations a été remise en question.

Aucune étude visant à tester l'hypothèse selon laquelle la cotation du risque modifie par elle-même l'issue périnatale n'a encore été publiée. Cependant une application appropriée de l'évaluation clinique des facteurs de risque (Section B, 1-5) a été associée, sur une base individuelle, à une amélioration des résultats périnatals.

On reconnaît, par ailleurs, la valeur éducative, surtout pour ceux ou celles qui dispensent des soins de santé, de l'utilisation de la cotation ou de l'évaluation du risque lorsque cette méthode est appliquée à une population de femmes enceintes(5-33).

COMMENTAIRES SUR LES RECOMMANDATIONS

Il est évident qu'il existe de nombreux facteurs susceptibles d'augmenter le risque d'une issue défavorable de la grossesse. Néanmoins, il est urgent de pousser plus avant les recherches qui détermineraient si les risques que représentent ces facteurs sont réels ou imaginaires ou si l'avantage que représentent certaines interventions est réel ou imaginaire. Cependant, il peut être difficile d'évaluer la signification de certains facteurs parce que les études conçues pour le tester sont parfois trop complexes ou impraticables ou, encore, entravées par des obstacles majeurs relevant de l'éthique. Tout comme il existe certaines méthodes admises d'interventions dont la valeur n'a pas été établie avec précision, mais qui sont difficiles à abolir.

Recommandation #6. Des études spécifiquement conçues pour la détermination de la validité du système de cotation du risque devraient être encouragées et appuyées.

Recommandation #7. L'évaluation du risque chez la femme enceinte s'étant avérée d'une valeur certaine, celle-ci devrait être universellement appliquée.

2. La durée et la nature de l'emploi pendant la grossesse

Il n'existe actuellement aucune donnée ou rapport appropriés permettant de répondre aux questions relatives à l'effet de la durée ou de la nature de l'emploi sur la grossesse et sur son issue.

Ce domaine est devenu d'autant plus important que le nombre de femmes en âge de procréer qui arrivent sur le marché du travail a augmenté de façon continue pendant ces dernières années. De plus, les lois, les conventions collectives, les avantages sociaux dont bénéficient les femmes enceintes qui travaillent confèrent à ces questions une importance pratique considérable. La principale conclusion de l'American College of Obstetricians and Gynecologists qui ressort de son rapport au Ministère américain de la santé et de l'éducation a été que "La femme normale, qui a une grossesse sans complication et un foetus normal, et qui occupe un emploi ne présentant pas de risque plus grand que celui qu'elle rencontrerait dans la vie de tous les jours, peut continuer à travailler sans interruption jusqu'au début de la période d'accouchement et reprendre son emploi plusieurs semaines après un accouchement sans complication". Cependant, même si cette conclusion admet en principe que la femme peut continuer à travailler pendant la grossesse, elle révèle une absence de données factuelles qui permettraient de conseiller judicieusement les femmes enceintes.

Les conséquences économiques qu'entraîneraient, tant pour la femme que pour la société, les restrictions de travail et le coût des avantages sociaux, ont besoin d'être clairement identifiées. Les effets du travail à la maison sur la

grossesse et sur son issue, la relation qui existe entre le stress, les facteurs socio-économiques, etc., d'une part, et l'emploi et la grossesse d'autre part, doit être clarifiée, comme doit être évaluée la relation entre la grossesse et les activités non reliées à l'emploi telles que l'artisanat, le sport, etc.

Les nouvelles tendances qui se dessinent au Canada concernant l'emploi des femmes enceintes, et la répercussion financière et sociale de ces changements, sont des questions de première importance auxquelles fait face notre société moderne (34-41).

Recommandation #8. Des études contrôlées et conçues de façon appropriée devraient être entreprises pour déterminer l'effet, sur la grossesse de la durée et de la nature de l'occupation de la femme enceinte.

Recommandation #9. Les répercussions, en termes de coûts tant pour la femme enceinte que pour la société, des diverses solutions relatives au travail des femmes pendant la grossesse devraient être évaluées.

3. L'exposition aux substances toxiques et les anomalies congénitales

La plupart des études ne permettent pas une identification précise des agents potentiellement nocifs, des niveaux d'exposition dangereux et des périodes de sensibilité pendant la grossesse. Pourtant, certains rapports ont signalé que les avortements spontanés ont augmenté chez des femmes qui travaillent dans les salles de chirurgie, dans les compagnies de fonderie d'acier, ou à la production du styrène ou de la rayonne. D'autres études ont rapporté une augmentation dans la prévalence des anomalies congénitales parmi les enfants des jardinières, des standardistes, des femmes travaillant

dans les usines de plastique, les fonderies d'acier, les laboratoires pharmaceutiques, les salles d'opérations et les usines qui utilisent des solvants organiques. Des études intensives sont donc nécessaires pour clarifier les risques de telles expositions pendant la grossesse chez ces femmes et chez celles qui travaillent dans d'autres domaines comme celui des écrans cathodiques.

Recommandation #10. Des études devraient être entreprises sur l'effet des substances toxiques dans le lieu de travail et leur effet sur la femme enceinte et sur son foetus.

4. Le saignement antepartum précoce et l'issue de la grossesse

Un saignement antepartum précoce, antérieur à 20 semaines, devrait être considéré comme un risque accru de complications tardives de la grossesse, telles que naissance prématurée, anomalies congénitales, mortalité périnatale accrue. L'Ontario Perinatal Mortality Study [64] a révélé un taux de naissances prématurées de 5,9% chez les patientes qui n'avaient pas de saignement prématuré contre 14,5% chez les patientes qui avaient un saignement prématuré. Le taux de mortalités périnatales était également plus élevé: 22,9 chez celles qui n'avaient pas de saignement comparativement à 65,2 chez celles qui avaient eu des saignements. Les seules études qui ont montré un taux accru d'anomalies congénitales ont été des études rétrospectives et comportaient par conséquent un biais de rappel assez fort [42-53].

Recommandation #11. Il faudrait entreprendre des études prospectives pour clarifier la relation existant entre un saignement précoce pendant la grossesse et l'issue de la grossesse, en mettant l'accent en particulier sur les anomalies congénitales.

5. Le supplément nutritionnel

Bien que les écrits traitant de l'importance d'une bonne alimentation pendant la grossesse soient nombreux et bien qu'on ait pu établir une certaine corrélation entre, d'une part, un faible poids à la grossesse et un faible gain pondéral et, d'autre part, des bébés de faible poids à la naissance, on n'a pas réussi à démontrer qu'un supplément nutritionnel a, à lui seul, un effet direct sur l'issue de la grossesse. Les articles qui rendent compte des études entreprises à ce sujet révèlent de nombreux défauts dans la conception de ces études, tels que l'incapacité d'affirmer si le supplément a été réellement ingéré, s'il a été réellement pris en plus du régime habituel ou s'il ne lui a pas été simplement substitué. De tels défauts dans l'étude empêchent généralement une évaluation exacte des effets du supplément nutritionnel (54-72).

Recommandation #12. Des études prospectives, bien contrôlées, ayant trait à l'effet du supplément nutritionnel et du régime alimentaire sur l'issue de la grossesse devraient être effectuées.

6. L'élévation de la tension artérielle: sa signification pour la mère

La grossesse peut démasquer une hypertension latente mais nous savons peu de choses sur les conséquences précoces et tardives de ce trouble pour la mère. Pourtant l'hypertension grave due à la grossesse reste l'une des principales causes de mortalité maternelle (73-93).

Recommandation #13. Un effort de recherche sérieux devrait être fait pour élucider la patho-physiologie de l'hypertension gravidique et sa relation avec des complications pour la mère.

7. La grossesse prolongée ou passée terme

Parce que la mortalité périnatale est relativement faible dans le cas d'une grossesse prolongée, l'utilisation de ce marqueur dans l'analyse statistique est limitée. Cependant, des études descriptives rapportent une incidence accrue d'inductions du travail, de traces de méconium dans le liquide amniotique, de césariennes, et indiquent le besoin de recherches supplémentaires portant spécialement sur la morbidité dans le cas de ce type de grossesse (94-102).

Recommandation #14. Des études prospectives adéquatement contrôlées, portant sur les grossesses prolongées, doivent être entreprises avec une importance particulière accordée à la morbidité foetale et maternelle.

D. INTERVENTIONS CONTROVERSÉES

1. Les soins prénatals: personnel et programmes

Très peu d'études ont examiné de façon appropriée la relation qui existe entre la formation et la qualification du personnel qui dispense les soins prénatals et l'issue de la grossesse. Les difficultés inhérentes à de telles études les rendent presque impossibles à mener à terme de façon satisfaisante. (À titre d'exemple: la fréquence des examens prénatals et la date de la première visite sont étroitement reliées à des facteurs socio-économiques qui, eux-mêmes, influent sur l'issue de la grossesse.)

Une étude entreprise dans le cadre de l'omnipratique et dans laquelle les soins prénatals ont été confiés, de façon aléatoire, à un médecin et à une infirmière praticienne, n'a révélé aucune différence quant aux résultats.

D'autres études menées dans des communautés rurales ont révélé une amélioration significative des résultats lorsque des programmes de soins prénatals ont été appliqués par une infirmière sage-femme dans des localités ou de tels programmes n'avaient jamais existés. Cependant, l'analyse des preuves a dévoilé les difficultés inhérentes aux études sur l'efficacité des programmes de soins prénatals ou sur la façon dont ils sont appliqués et qui ont presque empêché de mener à terme ces études de façon satisfaisante (103-115).

Recommandation #15. Le Groupe de travail recommande d'apporter une aide soutenue aux programmes de soins prénatals et d'accorder une importance particulière au dépistage des grossesses à risque.

2. Les programmes de cours prénatals

L'importance accordée récemment aux programmes de cours prénatals et à leur répercussion possible sur les résultats périnatals est fortement controversée. Aussi, nous a-t-il paru important de déterminer la valeur des avantages que ces programmes sont censés procurer. Malheureusement, leur contenu et les critères sur lesquels est basée leur évaluation diffèrent d'une étude à l'autre, ce qui rend impossible la détermination de leur valeur.

De plus, on se demande dans quelle mesure ce type d'interventions est efficace. Là, encore, la documentation présente beaucoup de difficultés à cause de problèmes méthodologiques. Cependant, on sait que l'utilisation des analgésiques, de l'anesthésie, et des forceps a généralement diminué chez les femmes qui ont suivi ce genre de cours.

Aucune différence n'a été relevée quant à la durée du travail, la fréquence des complications, le poids de naissance, ou l'indice d'Apgar; par contre, la satisfaction psychologique retirée de l'expérience de l'accouchement tend à être plus grande.

Malheureusement, aucune de ces études n'a examiné le coût des avantages ou l'efficacité de ces programmes. Elles n'ont pas non plus démontré la présence d'avantages à long terme. Il ne semble pas, par ailleurs, que l'on ait réellement examiné les désavantages possibles tels que des attentes ou des objectifs peu réalistes. Il est difficile d'évaluer l'efficacité de ce type d'intervention parce que les buts visés par les diverses démarches sont différents (116-137).

Recommandation #16. Que l'on mette l'accent, de façon soutenue, sur l'humanisation du processus de l'accouchement, afin de maintenir et d'améliorer le niveau de satisfaction psychologique que cette expérience familiale devrait procurer. Cependant, le principe fondamental qui doit guider toute personne qui dispense des soins aux femmes enceintes doit sans cesse être le maintien et la protection du bien-être physique de la mère et de l'enfant.

3. L'échographie

Les examens échographiques peuvent aider à dépister les anomalies, à déterminer l'âge de la grossesse, à révéler la grossesse multiple, à localiser le placenta et à déterminer le mouvement et le rythme cardiaque du foetus. Les avantages de l'échographie varient selon la fonction que l'on attend de cette technique. En ce qui concerne la croissance foetale, il semble que l'échographie se soit avérée nettement utile à l'identification et à l'évaluation cliniques du retard de croissance intra-utérine.

L'échographie est aussi utile dans la détermination de l'âge foetal lorsqu'elle est utilisée de façon rationnelle et assez tôt au cours de la grossesse. Par conséquent, et bien que le nombre d'études prospectives contrôlées à ce sujet soit assez faible, il apparaît clairement au Comité que l'échographie doit nécessairement être effectuée avant l'amniocentèse (138-201).

Recommandation #17. Des études permettant d'obtenir l'information nécessaire à l'évaluation des effets potentiels à long terme de l'échographie sur le foetus doivent être entreprises de toute urgence.

Recommandation #18. Jusqu'à ce que de telles études aient été terminées, l'utilisation de l'échographie dans la grossesse, de façon automatique et sans indications spécifiques, doit être découragée.

Recommandation #19. Il est nécessaire d'établir des normes pour la formation des échographistes.

4. Le monitorage électronique intrapartum du rythme cardiaque foetal

Le monitorage du rythme cardiaque foetal a été implanté pour aider le médecin à identifier toute souffrance foetale, et à décider de l'intervention appropriée. La plupart des études ont montré qu'un monitorage électronique foetal a une valeur de prédiction négative élevée, c'est-à-dire qu'un tracé normal prédira très probablement un nouveau-né non asphyxié. Malheureusement, la corrélation entre un tracé anormal et une mauvaise issue n'a pas été aussi bonne et un tel tracé doit par conséquent être interprété conjointement à toutes les autres données disponibles. Le Groupe de travail chargé de l'obtention d'un accord sur le diagnostic anténatal, qui relève de l'Institut National de la santé et du développement

de l'enfant, ainsi que la Société des obstétriciens et gynécologues du Canada, suggèrent que l'utilisation des moniteurs électroniques soit sérieusement envisagée chez les patientes à risque élevé. Par contre, aucune preuve valable ne démontre les effets avantageux du monitorage électronique foetal dans le cas des grossesses où aucun risque n'a été identifié.

A cause de la complexité et de l'importance de l'évaluation du monitorage foetal intrapartum, nous renvoyons le lecteur intéressé à cette question à l'Annexe 4.

Les monitorages antepartum et intrapartum du coeur foetal sont largement utilisés au Canada aujourd'hui et ont une valeur manifeste. Cependant, la documentation à ce sujet ne comporte pas un nombre suffisant d'études appropriées pour que l'on soit en mesure d'évaluer certaines applications de ces techniques (202-243).

Recommandation #20. Des études prospectives, conçues de façon appropriée, portant sur le monitorage antepartum et intrapartum du coeur foetal doivent être entreprises afin que l'on puisse établir la validité de certaines applications de cette technique.

5. Les tocolytiques

L'accouchement prématuré est le plus important facteur de morbidité et de mortalité périnatales. Aussi la prévention et le traitement du travail prématuré sont-ils d'une importance primordiale.

L'efficacité de la tocolyse est difficile à évaluer, à cause de problèmes méthodologiques (e.g. difficulté de

définir le travail prématuré, difficulté à obtenir la médication placebo ayant des effets secondaires similaires à ceux du tocolytique afin de réduire au minimum le biais de l'observateur, taille de l'échantillonnage, standardisation des objectifs terminaux). L'examen des rapports montre que l'objectif du traitement n'a pas toujours été le même (e.g. retarder l'accouchement de 24 à 48 heures, réduire l'incidence du syndrome de détresse respiratoire ou des décès, ou encore accroître le nombre des accouchements à terme) (244-283).

Recommandation #21. Des essais doivent être conçus de façon à permettre de déterminer quels sont les effets secondaires des tocolytiques sur la mère et le foetus, et si une amélioration éventuelle de l'issue peut être attribuée à l'utilisation de ces agents.

6. Le transfert de la mère comparativement au transfert du nouveau-né

On n'a pas pu évaluer avec précision l'avantage du transfert du nouveau-né par rapport à celui de la mère, étant donné qu'aucun essai aléatoire, comparant le transfert et le maintien des mères ou des nouveau-nés dans des centres non spécialisés, n'a été effectué. Toutes les études dont nous avons pris connaissance ont des problèmes méthodologiques majeurs dont l'un des plus importants est relié au fait que, dans le cas du transfert du nouveau-né, les sujets sont sélectionnés, avant le transfert, devant l'évidence d'une maladie, ou bien exclus lorsqu'il ne semble pas y avoir d'espoir de survie. Par contre, la sélection des mères pour le transfert est fondée sur des problèmes réels ou potentiels. Il semble évident que les foetus nécessitant des soins intensifs et

spécialisés à la naissance devraient bénéficier d'un transfert vers des centres où ces soins peuvent leur être rapidement donnés. C'est pourquoi, il semble qu'un essai aléatoire, même s'il est désirable, serait contraire à l'éthique.

Le principe du transfert maternel pour des raisons de problèmes potentiels affectant le foetus ou la mère a été accepté par les membres de la profession médicale et par tous les ministères de la santé au Canada. Le principe du transfert du foetus à risque in utero vers un centre spécialisé a été unanimement accepté en théorie. Le présent Comité appuie fortement ce principe.

L'implantation du concept du transfert maternel-foetal n'est pas encore adéquate, à cause de problèmes d'application et du manque d'appui à divers niveaux de responsabilité (284-302).

Recommandation #22. Le transfert maternel-foetal doit, dans la mesure du possible, être préféré à celui du nouveau-né en difficulté.

Recommandation #23. Des programmes de transfert maternel dans le cadre d'un système régionalisé doivent être appliqués de façon uniforme à travers tout le Canada, de préférence au transfert du nouveau-né.

7. L'analyse du liquide amniotique

La mesure de la densité optique du liquide amniotique s'est avérée d'une valeur certaine pour le traitement de l'iso-immunisation, comme l'a été l'utilisation du liquide amniotique pour l'évaluation du risque d'anomalies

génétiques chez certaines femmes enceintes. En outre, ces dernières années, de nombreuses recherches ont été faites sur un certain nombre de constituants du liquide amniotique mais elles n'ont pas réussi à prouver que ces constituants pouvaient être utilisés dans l'évaluation de la maturité foetale. Actuellement, les principales recherches s'intéressent à la mesure des phospholipides du liquide amniotique et, plus particulièrement, à la relation qui existe entre le ratio lecithin-spingomyelin (L/S) et la prédiction de la maturité pulmonaire foetale. La validité des tests s'appuie sur un ensemble considérable de preuves et est fortement étayée par les publications parues sur le sujet. Ces études, cependant, n'incluent pas les troubles où le ratio L/S est moins valable, comme dans le cas des femmes enceintes atteintes de diabète gravidique, par exemple.

Aucune étude ne s'est encore intéressée à l'utilité éventuelle de certains constituants du liquide amniotique découverts plus récemment comme les phosphati-dylglycerols (PG). Le Comité reconnaît, cependant, qu'il s'agit là d'un secteur très prometteur (303-311).

8. Les gluco-corticostéroïdes et l'amélioration de la maturité pulmonaire foetale

Le Comité aurait souhaité faire une déclaration concernant cette thérapie controversée, utilisée dans la prévention du syndrome de détresse respiratoire chez l'enfant prématuré. Des contraintes de temps n'ont pas permis une revue détaillée des publications parues sur le sujet.

Deux essais cliniques aléatoires ont démontré que les gluco-corticostéroïdes réduisent l'incidence du syndrome

de détresse respiratoire, mais n'ont pas prouvé clairement qu'ils diminuent la mortalité périnatale. Il n'est pas prouvé par ailleurs que ces produits ont à court terme des effets défavorables significatifs, mais certains effets à long terme potentiellement dangereux sont actuellement à l'étude (référence de l'étude de l'Institut National de la Santé).

Recommandation #24. À cause d'effets à long terme potentiellement dangereux, les gluco-corticostéroïdes utilisés dans la prévention de la détresse respiratoire chez le nouveau-né ne devraient être administrés que dans les cas où leurs avantages à court terme sont jugés essentiels.

9. Les soins intrapartum - obstétriciens, omnipraticiens ou infirmières spécialisées en soins obstétricaux

Il n'existe pas d'étude canadienne traitant de ce sujet, étant donné que la pratique de l'obstétrique par d'autres que les médecins est illégale au Canada. Cependant, des études provenant des États-Unis permettent de croire que la pratique des soins obstétricaux dispensés par des infirmières sages-femmes constituent un moyen économique, sû et acceptable de fournir ce type de soins à certains groupes de femmes. Néanmoins, les preuves ne sont pas concluantes dans la mesure où les résultats des études peuvent être faussés par:

1. La diversité des pratiques, celles-ci allant de l'accouchement à la maison à l'accouchement dans des maternités indépendantes ou rattachées à un hôpital, ou dans les salles d'accouchement des hôpitaux.

2. La diversité des critères sur lesquels se fonde le choix des femmes susceptibles d'être traitées par les infirmières en soins obstétricaux (et des autres facteurs de sélection).

3. La pratique conjointe et le transfert vers les soins médicaux à différents stades de la grossesse.

Les résultats de ces études peuvent être classés sous trois grandes rubriques: la sécurité, l'acceptabilité et le coût. Aucune étude n'a démontré un accroissement de la mortalité périnatale découlant du fait que les patientes étaient suivies par une infirmière en soins obstétricaux. Aucune étude ne s'est intéressée de façon spécifique à l'acceptabilité, bien que toutes les études aient conclu, en se basant sur la persistance des demandes et des transferts, que le système est acceptable. Malgré les réserves exprimées au début par certains médecins, toutes les études ont rapporté, par la suite, que le concept de l'infirmière en soins obstétricaux a été accepté.

Il n'existe au Canada aucune donnée permettant de comparer le rôle de l'omnipraticien à celui de l'obstétricien. Certains spécialistes agissent comme médecins de premier recours pour un grand nombre de femmes enceintes, et un grand nombre d'omnipraticiens ne pratiquent pas l'obstétrique.

Il semble que les trois intervenants - infirmière en soins obstétricaux, obstétricien et omnipraticien - aient des rôles complémentaires. N'importe quel système fonctionne mieux lorsqu'on utilise le personnel de façon appropriée et selon le niveau de formation de chacun (312-322).

Recommandation #25. Bien que le rôle de l'infirmière en soins obstétricaux soit reconnu dans plusieurs pays, il n'a pas encore été admis au Canada. Par conséquent, le Comité propose la constitution d'un groupe de travail national qui se pencherait sur cette importante question. Le "noyau" de ce groupe devrait comprendre des infirmières spécialisées en soins périnatals ainsi que des pédiatres périnatologistes et des obstétriciens. D'autres représentants des professions médicale et infirmière devraient également en faire partie.

10. La mortalité et la morbidité

Il est généralement admis que la mortalité périnatale peut ne pas être un bon indicateur de la qualité des soins périnatals et ne permet pas toujours de désigner les secteurs qui exigeraient des soins préventifs. Quant à la morbidité néonatale, elle n'a pas été clairement définie. Une étude de certains types de morbidité (e.g. les crises épileptiques néonatales, l'arriération mentale, l'infirmité motrice cérébrale) pourrait, en partie, combler cette lacune.

Recommandation #26. La morbidité néonatale doit être définie avec précision, et sa capacité à refléter la qualité et les effets des soins périnatals, déterminée et évaluée.

IV. RAPPORT DU SOUS-COMITÉ CHARGÉ D'UNIFORMISER LA TERMINOLOGIE MATERNELLE ET PÉRINATALE

INTRODUCTION

À l'une des premières réunions du Groupe de travail sur les grossesses à risque élevé, il a été convenu de mettre au point une terminologie périnatale uniforme. Durant ces dix dernières années un travail considérable a été accompli dans ce domaine. Le fruit de ce travail a permis au présent sous-comité de faire des recommandations en vue d'une uniformisation de la terminologie maternelle et périnatale. Pour ce faire, il a utilisé les documents suivants:

1. Les recommandations du Comité de médecine périnatale de la Société des obstétriciens et gynécologues du Canada et du Comité du foetus et du nouveau-né de la Société canadienne de pédiatrie, octobre 1974.

2. Un article informatif intitulé "Hospital Perinatal Committee" publié par l'Institut canadien de la santé de l'enfant, en 1981 et réimprimé dans les "Dimensions in Health Care Services", 1979.

3. Williams Obstetrics, seizième édition, publié par Pritchard and MacDonald.

DÉFINITIONS UNIFORMES RECOMMANDÉES PAR LE SOUS-COMITÉ

Naissance

Expulsion ou extraction complète du corps de la mère d'un foetus pesant 500 g ou plus, indépendamment de l'âge de la grossesse.

Naissance vivante

Naissance d'un foetus pesant 500 g ou plus, indépendamment de l'âge de la grossesse, qui, après son expulsion ou son extraction complète, respire ou manifeste tout autre signe de vie, tels que battement du coeur, pulsation du cordon ombilical ou contraction effective d'un muscle soumis à l'action de la volonté.

Mortinaissance (mort du foetus)

Naissance d'un foetus pesant 500 g ou plus, indépendamment de l'âge de la grossesse, qui ne montre aucun signe de vie après sa naissance.

Avortement

Expulsion ou extraction complète du corps de la mère d'un foetus ou d'un embryon pesant moins de 500 g, indépendamment de l'âge de la grossesse, qu'il y ait signe de vie ou non, et que l'avortement ait été spontané ou provoqué.

Enfant prématuré

Enfant né avant la fin de la 37^{e} semaine de grossesse (moins de 259 jours).

Enfant né à terme

Enfant né durant la période allant de la fin de la 37^{e} semaine de grossesse à la fin de la 42^{e} semaine de grossesse (259 à 293 jours).

Enfant né après terme

Enfant né après la fin de la 42^{e} semaine de grossesse (294 jours ou plus).

Poids de naissance faible

Poids, à la naissance, d'un foetus ou d'un nouveau-né égal ou supérieur à 500 g, mais inférieur à 2500 g.

Poids de naissance normal

Poids, à la naissance, d'un foetus ou d'un nouveau-né égal ou supérieur à 2500 g.

Poids de naissance

Résultat de la première pesée du foetus ou du nouveau-né effectuée immédiatement après l'accouchement. Ce poids doit être mesuré de préférence dans la première heure de vie avant que ne commence, d'une manière notable, la dépression pondérale post-natale.

On recommande les regroupements par poids de naissance suivants:

de 500 g à 749 g inclusivement
de 750 g à 999 g inclusivement
de 1000 g à 1249 g inclusivement
de 1250 g à 1499 g inclusivement
de 1500 g à 1999 g inclusivement
de 2000 g à 2499 g inclusivement
de 2500 g à 2999 g inclusivement
de 3000 g à 3499 g inclusivement
de 3500 g à 3999 g inclusivement
de 4000 g à 4499 g inclusivement
de 4500 g à 4999 g inclusivement
5000 g et plus

Période néonatale précoce

Période s'étendant de la naissance à la fin du 7^{e} jour de vie.

Mort néonatale précoce

Mort d'un enfant né vivant et pesant 500 g ou plus à la naissance, survenue entre la naissance et la fin du 7^{e} jour de vie.

Taux de mortalité néonatale précoce

Nombre de morts néonatales précoces de nouveau-nés pesant 500 g ou plus, pour 1000 enfants nés vivants.

Période néonatale tardive

Période s'étendant de la fin du 7^{e} jour à la fin du 28^{e} jour de vie.

Mort néonatale tardive

Mort d'un enfant né vivant pesant 500 g ou plus à la naissance et survenue entre la fin du 7^{e} jour et la fin du 28^{e} jour de vie.

Taux de mortalité néonatale tardive

Nombre de morts néonatales tardives d'enfants pesant 500 g ou plus pour 1000 naissances d'enfants vivants.

Mortinaissance (mort du foetus)

Naissance d'un foetus pesant 500 g ou plus, indépendamment de l'âge de la grossesse, qui ne montre aucun signe de vie après la naissance.

Taux de mortinatalité (taux des mortinaissances)

Nombre d'enfants mort-nés pesant 500 g ou plus, pour 1000 naissances totales.

Période périnatale

Période s'étendant du moment où le foetus atteint 500 g jusqu'à la fin du 7^{e} jour de vie.

Mort périnatale

Mort d'un enfant mort-né ou né vivant, dans les deux cas pesant 500 g ou plus, survenant avant la naissance, à la naissance ou au cours des 7 premiers jours de vie.

Taux de mortalité périnatale (500 grammes ou plus)

$$\frac{\text{Mortinaissances + morts néonatales survenues pendant la 1er semaine (dans les deux cas, enfants pesant 500 grammes ou plus)}}{\text{Naissances vivantes + mortinaissances (dans les deux cas, enfants pesant 500 g ou plus)}} \times 1\,000$$

Période périnatale standard

Période s'étendant du moment où le foetus atteint 1000 g jusqu'à la fin des 7 premiers jours de vie.

Mort périnatale standard

Mort d'un enfant mort-né ou né vivant - dans les deux cas pesant 1000 g ou plus - survenant avant la naissance, à la naissance ou au cours des 7 premiers jours de vie.

Taux de mortalité périnatale standard (1000 g ou plus) (international)

$$\frac{\text{Mortinaissances + morts survenues au cours de la première semaine (dans les deux cas, enfants pesant 1000 g ou plus)}}{\text{Naissances vivantes + mortinaissances (dans les deux cas, enfants pesant 1000 g ou plus)}} \times 1\,000$$

Note: "La première semaine" doit être interprétée comme sept périodes de 24 heures.

Mort maternelle

Mort de la mère résultant de causes obstétricales; ces causes peuvent être directes ou indirectes.

Mort maternelle due à des causes obstétricales directes

Mort de la mère résultant de complications obstétricales (grossesse, travail et suites de couches), d'interventions, d'omissions, d'un traitement incorrect ou d'un enchaînement d'événements résultant de l'un quelconque des facteurs ci-dessus. (Exemple: exsanguination provoquée par la rupture de l'utérus.)

Mort maternelle due à des causes obstétricales indirectes

Mort de la mère non attribuable à des causes obstétricales directes mais résultant d'une maladie préexistante ou d'une infection qui s'est développée pendant la grossesse, le travail ou la période puerpérale, et qui a été aggravée par les effets physiologiques de la grossesse. (Exemple: la sténose mitrale.)

Mort d'origine non obstétricale

Mort de la mère résultant d'accidents ou d'incidents non reliés à la grossesse. (Exemple: décès dû à un écrasement d'avion.)

Taux de mortalité maternelle

Nombre de morts maternelles résultant de causes obstétricales, pour 100 000 naissances vivantes.

À noter que les définitions ci-dessus de mortalité maternelle, adaptées de Williams Obstetrics ne spécifient pas le temps de grossesse. On suggère que ce temps soit défini comme la période s'étendant du moment de la conception à 42 jours après l'accouchement.

Recommandation #27. Le Groupe de travail recommande l'adoption, partout à travers le Canada, des définitions précédentes pour une terminologie statistique maternelle et périnatale uniforme. Il est de plus recommandé que ces définitions soient transmises aux autorités fédérales et provinciales intéressées, pour un examen plus approfondi en vue de leur diffusion.

V. L'AVENIR DU GROUPE DE TRAVAIL SUR LES GROSSESSES À RISQUE ÉLEVÉ

Comme nous l'avons mentionné dans l'introduction, le rapport de la Commission canadienne pour l'Année internationale de l'enfant a recommandé que les gouvernements "adoptent une politique faisant de la santé de la mère et de l'enfant une priorité pour les cinq prochaines années". Le Groupe de travail sur les grossesses à risque élevé a été heureux de pouvoir contribuer à clarifier certains aspects du traitement de la période prénatale permettant d'améliorer l'issue de la grossesse pour la mère et l'enfant. Les connaissances et les attitudes concernant les soins périnatals évoluent rapidement, et le Groupe de travail estime important que l'acquis dans l'amélioration des soins auquel il est parvenu ne soit pas perdu. Il recommande, par conséquent, qu'un comité ad hoc des soins prénatals et périnatals soit formé parallèlement au comité mis sur pied pour assurer le suivi des recommandations de la Commission canadienne pour l'Année internationale de l'enfant.

Recommandation #28. Qu'un comité ad hoc de spécialistes en soins périnatals et prénatals soit constitué et chargé du suivi du rapport de la Commission canadienne pour l'Année internationale de l'enfant, et de ce rapport du Groupe fédéral de travail. Il aurait pour objectif spécifique de s'assurer que les Canadiennes obtiennent la meilleure issue possible de la grossesse, telle qu'elle a été définie antérieurement.

ANNEXE 1

RÉFÉRENCES

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RÉFÉRENCES

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ANNEXE 2

MEMBRES DU GROUPE DE TRAVAIL ET PERSONNES RESSOURCES

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MEMBRES DU GROUPE DE TRAVAIL ET PERSONNES RESSOURCES

MEMBRES

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ANNEXE 3

RAPPORT DU SOUS-COMITÉ SUR LES DOSSIERS PRÉNATALS

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TABLE DES MATIÈRES

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1. Analyse des dossiers prénatals provinciaux et de leurs fonctions

L'enregistrement et la documentation de l'information obstétricale ont évolué au cours des années pour donner lieu à la création d'un ensemble de données relativement uniformes formant le dossier prénatal. Dans les cas de grossesse, ce dossier sert à fournir, sous la forme d'un seul document, un résumé complet et global des différents facteurs qui peuvent influer directement ou indirectement sur l'issue de la grossesse. Lors de chaque visite, le médecin peut utiliser ce document pour se rafraîchir rapidement la mémoire et évaluer tout changement qui a pu survenir dans les données enregistrées précédemment. Ce document peut être transféré avec la patiente ou consulté dans la salle d'accouchement, là où l'on peut être amené à prendre des mesures qui doivent tenir compte des événements antérieurs. Après avoir examiné des spécimens de dossiers prénatals utilisés dans huit provinces, le comité en est arrivé à la conclusion que, dans toutes les provinces, le dossier semble avoir été conçu de façon à remplir ces fonctions.

Toutes les provinces font en sorte que le médecin puisse conserver l'original du dossier prénatal, dont une copie au moins pourra être transmise à l'hôpital ou à la patiente.

Dans toutes les provinces, le dossier prénatal prévoit l'enregistrement de certaines informations de base et réserve l'espace nécessaire pour l'enregistrement des données résultant de chacune des visites effectuées au cours de la grossesse. Les éléments d'information qui sont enregistrés au cours de chaque visite prénatale sont à peu près uniformes à travers le pays et le nombre de visites dont on peut enregistrer les données sur un même document varie de 14 (pour 5 provinces) à 19 (pour la province de Terre-Neuve). Chaque dossier prénatal comporte un certain nombre d'éléments qui servent "d'aide-mémoire" (liste de contrôle). Ainsi, le dossier une fois rempli contiendra un nombre uniforme d'éléments d'information constituant une base de données minimales pour chaque

femme enceinte. Il est étonnant de constater le peu de différence qui existe dans l'ensemble entre le contenu de base des différents dossiers provinciaux (voir pages 120 et +). Les données de l'anamnèse originale et celles qui découlent des visites prénatales subséquentes sont déjà relativement "standardisées" dans la plupart des cas.

Encore une fois, bien que le format des dossiers et le nombre des pages qu'ils contiennent varient d'une province à l'autre, chacun d'eux vise à fournir aux médecins un document pratique orienté principalement vers les soins à donner à la femme enceinte. L'"aide-mémoire", avec ou sans liste de contrôle, permet de relever et d'enregistrer rapidement les données de l'anamnèse, facilite l'examen du dossier à chacune des visites de la patiente et jusqu'à un certain point, aide à surmonter quelques-uns des problèmes d'illisibilité de l'écriture dans les cas où plus d'un médecin sont associés au traitement de la patiente. Le but primordial semble avoir été de concevoir un dossier fonctionnel, qui puisse être utile au traitement de la patiente. Toutefois, aucun des dossiers provinciaux ne semble avoir été spécifiquement conçu pour une cueillette ultérieure des données et leur stockage en vue de leur traitement par ordinateur.

Au moins sept des huit provinces semblent avoir admis la nécessité, d'une part, du dépistage de certains facteurs susceptibles d'augmenter, pour la mère ou le foetus, le risque d'une issue défavorable de la grossesse et, d'autre part, la préparation d'une liste de ces facteurs à l'usage du médecin traitant. Sous ce dernier aspect, néanmoins, il y a moins d'uniformité. Certaines provinces utilisent un système de classification assez large comportant des différences dans le choix des facteurs de risque à l'intérieur de chaque catégorie. D'autres provinces utilisent un système de mesure numérique pour l'identification du risque, qui varie d'une province à l'autre.

En résumé, il semble que tous les dossiers prénatals provinciaux aient certaines caractéristiques communes. La standardisation du dossier prénatal telle qu'elle a évolué dans chaque province semble vouloir aider le médecin en visant les objectifs suivants:

1. Établir un document fournissant les données de base nécessaires à un traitement approprié de la femme enceinte.

2. Réduire le temps requis pour obtenir ce dossier.

3. Permettre au médecin traitant de revoir "d'un coup d'oeil" les données de base ainsi que l'information recueillie au cours des visites prénatales subséquentes, qui pourraient influencer le traitement.

4. Apporter une certaine aide à l'évaluation clinique, en indiquant les facteurs de risque qui pourraient influer sur l'issue de la grossesse.

5. Permettre un enregistrement continu des événements qui pourraient modifier le traitement à appliquer lors de l'admission de la patiente à la salle d'accouchement ou lors du transfert de la patiente à un autre médecin.

2. Contenu des dossiers prénatals

Les systèmes d'enregistrement précités ont pour objectif de répondre tant aux besoins de l'omnipraticien qu'à ceux du spécialiste. Pour cela, il faut admettre que certains compromis sont nécessaires. La proportion des accouchements effectués par les omnipraticiens varie d'une province à l'autre mais on estime qu'elle est d'au moins 50% pour tout le Canada. Par conséquent, en examinant les fonctions que doit remplir le dossier prénatal, il devient évident que les besoins des omnipraticiens doivent être pris en considération. En dépit des différences qui existent d'une province à l'autre, entre les modes de transfert vers le spécialiste, et malgré qu'il ait fallu

tenir compte des besoins tant des spécialistes que des omnipraticiens, le contenu des dossiers prénatals reste passablement uniforme. Moyennant certaines adaptations mineures, chaque dossier provincial pourrait contenir la même information de base, les différences existant actuellement, sur ce point, étant peu importantes. Par contre, une tentative d'uniformisation du contenu relatif aux facteurs de risque élevé pourrait être un sujet plus litigieux.

2.1 Eléments considérés comme fondamentaux ou essentiels et constituant une base commune à la plupart des dossiers prénatals

Méthode d'identification de la patiente

Identification du médecin traitant

Âge, date de naissance de la patiente

Parité

Date des dernières règles

Date prévue d'accouchement

Cycle menstruel

Méthode de contraception/date d'interruption

Amniocentèse génétique

Saignements depuis les dernières règles

Antécédents obstétricaux

mortinaissance, mort néonatale, prématurité, avortement, nombre d'enfants vivants

Accouchements antérieurs

date, poids de naissance, genre, grossesse, type d'accouchement, complications de la grossesse ou du travail, complications néonatales

Antécédents médicaux

maladie rénale, maladie cardiaque, stérilité, infections, diabète, épilepsie, infections des voies urinaires, allergies, transfusions sanguines antérieures et interventions chirurgicales

Antécédents familiaux

diabète, grossesses gémellaires, malformations congénitales, surdité héréditaire, tuberculose, hypertension

État actuel

hyperémésie, maladies fébriles, médication en cours, usage de l'alcool, des drogues, de la cigarette

Épreuves de laboratoire

hémoglobine, Rh, sérologie, rubéole, cytologie, glycémie, test de grossesse et culture de l'urine du milieu du jet

Examen initial

poids avant la grossesse, taille, poids actuel, examen complet et examen pelvien, taille de l'utérus comparativement à l'âge de la grossesse

Visites ou examens subséquents

date, âge de la grossesse, poids, analyses d'urine, pression sanguine, hauteur utérine, présentation, rythme du coeur foetal, remarques ou commentaires, date de la prochaine visite

Identification du risque

Cet élément forme une composante de la plupart des dossiers d'enregistrement prénatals qui ont été passés en revue. Il semble par conséquent qu'une certaine forme d'identification du risque doit être considérée comme une composante essentielle du dossier prénatal, surtout si l'un des objectifs de ce dossier est d'aider les omnipraticiens; une liste des facteurs de risque peut servir d'aide-mémoire pour chaque cas individuel.

2.2 Eléments optionnels du dossier prénatal

Ces éléments peuvent aider le médecin traitant mais semblent être une affaire de goût personnel. Par ailleurs, ils n'influeront probablement pas sur le traitement de la patiente et il n'est pas prouvé que leur documentation affecte de façon significative l'issue de la grossesse. Certains dossiers prénatals prévoient un espace et des aide-mémoire qui résument tous les résultats des examens (exemple: la gamma globuline anti-Rh, l'échographie, le G.T.T., les médicaments, le programme de transfert à 28 semaines, la consultation, etc.).

Les courbes de croissance sont un autre élément qui peut aider au diagnostic de l'hypertrophie ou du retard de la croissance intra-utérine.

Documentation (optionnelle)

Occupation de la patiente
Religion de la patiente
Origine ethnique de la patiente
Nom du père
Occupation du père
Religion du père
Habitudes alimentaires
Hôpital
Type d'anesthésie demandé
Exigences de l'occupation de la mère
Accouchement en présence du père
Cohabitation avec le bébé
Court séjour à l'hôpital
Circoncision
Pédiatre

Autres questions (optionnelles)

Ces questions semblent être un rappel des sujets que les médecins auraient intérêt à discuter avec la patiente; il reste à savoir s'ils ont réellement le temps de le faire.

Gain pondérable
Usage de la cigarette
Usage de l'alcool
Allaitement
Cours prénatals
Projets relatifs à l'emploi
Exercices physiques
Relations sexuelles

2.3 Facteurs de risque

La validité des facteurs de prédiction d'une issue défavorable actuellement utilisés, et la base sur laquelle cette issue est identifiée, sont des sujets étudiés par un autre sous-comité. Nous suggérons qu'à ce stade, l'on retienne une forme quelconque d'identification du risque, comme élément essentiel ou optionnel d'un dossier prénatal, étant donné que la plupart des provinces ont déjà pris cette orientation. À condition qu'ils soient utilisés comme une aide à l'évaluation clinique, leur inclusion jouera probablement un rôle utile, surtout auprès des omnipraticiens qui n'ont pas souvent des cas d'obstétrique.

Au cours d'une réunion sur les marqueurs du risque, le comité a décidé qu'un grand nombre d'entre eux étaient suffisamment évidents pour qu'on n'ait pas besoin de tester leur validité par d'autres recherches. On pourrait donc considérer la liste suivante, approuvée par le comité principal, comme une liste minimum:

Faible poids du bébé à la naissance
Mortinaissance ou mort néonatale antérieure
Troubles médicaux
Rh Iso-immunisation
Diabète gravidique
Grossesse multiple
Rupture spontanée prématurée des membranes
Prématurité
Présentation vicieuse

Un grand nombre d'autres facteurs de risque sont inclus dans les divers dossiers prénatals qui ont été distribués à tous les membres du comité. Leur inclusion ou leur exclusion dépendra probablement de l'issue des délibérations du sous-comité qui réétudie cette question.

3. La conception du dossier prénatal

Contrairement au contenu des dossiers prénatals, dont un grand nombre de données médicales et obstétricales sont communes, la forme du dossier prénatal varie considérablement d'une province à l'autre.

Néanmoins, il y a un point qui fera probablement l'unanimité: le dossier doit être en deux exemplaires afin qu'une copie puisse être gardée dans le dossier hospitalier de la patiente. Les améliorations à apporter à la forme du dossier devraient être suggérées par les personnes qui l'utilisent le plus. Elle doit en outre être inspirée par les fonctions du dossier prénatal, dont il a été question plus haut.

4. La cueillette des données

Étant donné que les différents dossiers provinciaux contiennent à peu près les mêmes données de base, on serait tenté d'envisager la cueillette de certaines données à partir du dossier. C'est particulièrement le cas de l'information relative aux grossesses à risque élevé traitées dans les hôpitaux, l'âge précis de grossesse auquel les risques pourraient être identifiés et la détermination des différences géographiques dans la proportion des grossesses à risque élevé. La prévalence de la sensibilité à la rubéole, l'état nutritionnel, ou le nombre de visites prénatales pourraient être d'autres exemples d'informations qu'il serait utile de recueillir sur une base provinciale ou nationale. Il existe toutefois certaines exigences qui doivent être remplies si l'on doit utiliser les dossiers prénatals pour une cueillette de données exactes.

Ce sont, en résumé:

1. L'utilisation régulière d'une formule spécifique

Toute démarche pour l'extraction de données doit englober la presque totalité de la population obstétricale. Or, ceci n'est

possible que si tous les médecins d'une province utilisent un dossier prénatal standardisé.

2. Une façon adéquate de remplir la formule

Un sondage portant sur plus de 2000 dossiers prénatals, effectué par un groupe de travail du Social Planning Council du Manitoba, a indiqué qu'il existe des variations considérables dans la façon d'enregistrer les données pour chaque rubrique: alors que certaines rubriques étaient remplies pour 80% des cas, d'autres l'étaient pour moins de 50%. Il est évident qu'avec ce genre de variations, la cueillette des données mènera à des résultats inexacts, puisque plusieurs éléments d'information auront été omis.

3. L'exactitude des données enregistrées

Tous les dossiers prénatals comportent un certain nombre de rubriques susceptibles de contenir des données "imprécises". Par exemple, si l'on veut une information précise au sujet de l'usage de la cigarette, il faudrait avoir des indications sur la marque de cigarette, la quantité de nicotine contenue dans cette marque, le nombre de cigarettes consommées, le temps de grossesse pendant lequel la patiente a continué de fumer et, le cas échéant, la date à laquelle elle a cessé de fumer. On peut appliquer ce même exemple à l'usage de l'alcool, des drogues, etc.

4. Les données relatives à l'issue de la grossesse

L'interprétation de l'information contenue dans le dossier prénatal doit être faite, dans bien des cas, en fonction de l'issue de la grossesse. Ce fait soulève certains problèmes concernant l'extraction des données à partir des dossiers des hôpitaux, problèmes qui remettent en question l'exactitude des mesures Apgar et d'autres mesures reliées à l'issue de la grossesse.

5. L'analyse des données

La cueillette des données implique leur analyse et soulève la question du choix du bureau qui assurerait la coordination de l'extraction de l'information; de l'endroit où celle-ci devrait être centralisée et de l'organisme qui serait chargé de l'analyse.

Par exemple, une information sur les habitudes alimentaires nécessiterait plus d'espace et plus de questions spécifiques que n'en comporte n'importe quel dossier prénatal actuellement en usage. Le concept de la cueillette des données dans cette perspective appellerait davantage une enquête par sondage et exigerait un temps plus long que celui dont pourrait disposer un médecin praticien.

Sous cet aspect, il devient extrêmement important de définir clairement la fonction du dossier prénatal. En effet, un même dossier ne peut servir à la fois de document de travail pour le praticien et d'instrument destiné à la cueillette de données exactes; si l'on tente un compromis pour répondre en même temps à ces deux objectifs, on finira certainement par produire un document qui ne satisfera ni l'un ni l'autre.

5. Résumé et conclusions

L'examen des différents dossiers prénatals en usage à travers le Canada révèle que toutes les provinces visent à en faire un document clinique à l'usage du médecin praticien. Malgré leur diversité apparente, tous ces dossiers sont sensiblement uniformes quant à l'information de nature obstétricale qu'ils contiennent. L'inclusion de données destinées à faciliter l'évaluation du risque obstétrical semble avoir été acceptée par presque toutes les provinces mais il existe très peu d'uniformité dans les systèmes d'évaluation du risque actuellement en usage. Il y a également une grande diversité dans la forme de la plupart des dossiers prénatals.

Il semble qu'un consensus puisse être atteint quant aux fonctions du dossier prénatal et quant à l'inclusion de l'information fondamentale que devrait comporter ce dossier, à titre de base minimale de données requises pour le traitement des patientes. Le problème de la forme du dossier sera probablement beaucoup plus difficile à résoudre, à cause surtout des contraintes de temps auxquelles est soumise la production du rapport final de ce comité. Quant à l'utilisation des dossiers prénatals pour la cueillette de données importantes, elle n'est probablement pas réaliste bien qu'un certain accord soit possible en ce qui a trait à certains éléments d'information qui sont communs à tous les dossiers et qui pourraient être recueillis sur une base provinciale à des fins de comparaison. Pour sa part, la question de l'évaluation du risque, et des marqueurs appropriés à ce genre d'évaluation, est actuellement étudiée par un autre sous-comité et le résultat des délibérations pourra, s'il y a lieu, être incorporé au dossier prénatal.

ANNEXE 4

MONITORAGE DU COEUR FOETAL: REVUE DES PUBLICATIONS

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MONITORAGE DU COEUR FOETAL: REVUE DES PUBLICATIONS

MONITORAGE FOETAL INTRAPARTUM

INTRODUCTION

Depuis le début des années 1800, les cliniciens reconnaissent que les bruits du coeur foetal constituent des signes importants. La pratique de l'auscultation et la connaissance des schémas du rythme du coeur foetal ont été recommandées par Kennedy dans une monographie publiée à Dublin en 1833. Vers la fin du 19ème siècle, Schwartz recommandait que le rythme du coeur foetal soit enregistré au cours du travail, à la fois pendant et entre les contractions, et avançait que l'"intoxication par asphyxie" du foetus modifiait ce rythme comme le font les contractions utérines. A peu près au même moment, d'autres médecins relevaient des schémas irréguliers et observaient l'effet des médicaments sur ces schémas. Il est donc surprenant que ces concepts aient largement disparu et qu'il ait fallu attendre jusqu'en 1950 pour voir les obstétriciens s'intéresser de nouveau au schéma du coeur foetal.

Quelques études effectuées en 1950, utilisant l'auscultation, laissent penser que les premières définitions de la souffrance foetale, basées sur le schéma du coeur foetal, avaient été des facteurs de prédiction inadéquats et médiocres.

Au cours des dix dernières années, l'usage des moniteurs électroniques a considérablement varié, mais il a dernièrement retrouvé une place importante à cause de l'amélioration de l'équipement et de l'adoption de la pratique du prélèvement du cuir chevelu foetal ainsi que d'autres variables du monitorage. L'opinion qui prévaut dans les années 1980 semble être que plus le monitorage est important et mieux il est fait, plus il est possible d'identifier toute souffrance foetale et d'intervenir à temps. Il reste à savoir jusqu'à quel point cette opinion est justifiée.

Bien que plusieurs articles aient été publiés à la fin des années 1960 sur l'évaluation et l'utilité des tracés du rythme du coeur foetal dans la prédiction de la souffrance foetale, ce n'est qu'en 1970 qu'une attention réelle a été accordée à cette pratique. C'est pourquoi nous avons entrepris de revoir les publications qui ont paru depuis 1970 jusqu'à ce jour.

DÉMARCHE SUIVIE POUR LA REVUE DES PUBLICATIONS

En nous basant sur les critères utilisés par le Groupe de travail sur l'examen de la santé périodique, nous avons cherché à évaluer

1. Le poids de la souffrance,
2. La validité et l'acceptabilité de la manoeuvre,
3. L'efficacité de l'intervention qui en résulte.

Le point 2 a été divisé par la suite en une série de questions posées dans le résumé préliminaire original sur le monitorage foetal qui a été présenté à ce comité en juin:

1. Quels sont les objectifs de cet indicateur du risque?
2. Dans quelle mesure il atteint ses objectifs?
3. Qui identifie le marqueur?
4. Quels sont les coûts de cet indicateur?
5. Quels en sont les avantages?
6. Quel en est le coût psychologique?

Les articles ont été passés en revue selon un ordre chronologique décroissant et ont été divisés en catégories selon la valeur de la conception de l'étude et la qualité de la preuve.

Le poids de la souffrance

La mesure la plus fréquemment suggérée a été celle de la mortalité périnatale. En 1978, en Ontario, celle-ci a été de 14,6/1000 accouchements. Bien que ce taux paraisse trop élevé comparativement à celui

d'autres nations industrialisées, cette mesure n'est pas assez fréquente pour être utilisée dans n'importe quelle série de cas, prise isolément. À cause des faibles dénominateurs, toute estimation de la mortalité périnatale reste nécessairement incertaine et, sans un intervalle de confiance, elle ne peut avoir que peu de signification par elle-même.

La deuxième mesure la plus fréquemment suggérée a été l'indice d'Apgar utilisé comme un autre moyen de mesurer "la souffrance foetale". Il est cependant difficile d'obtenir la réelle incidence d'indices d'Apgar faibles (<7) dans une population totale, étant donné qu'aucun des auteurs n'a effectué un sondage dans une communauté particulière et que les vérifications auprès des hôpitaux reflètent le biais du transfert. L'estimation moyenne semble être d'environ 15%, mais ce taux est probablement indûment élevé à cause du biais.

Question 1: QUEL EST L'OBJECTIF DE CET INDICATEUR?

L'objectif du monitorage du rythme du coeur foetal est d'identifier rapidement la souffrance foetale de manière à ce qu'on puisse prendre les mesures nécessaires pour éviter la mort intrapartum ou la naissance d'un foetus asphyxié et candidat à d'autres problèmes surtout au cours de la première semaine de vie. On part du principe qu'une souffrance foetale constitue un risque élevé de décès périnatal et de complications neurologiques entraînant un handicap.

Question 2: DANS QUELLE MESURE CET INDICATEUR ATTEINT-IL SES OBJECTIFS?

L'ensemble des publications traitent de cette question qui comporte deux aspects. Le premier (a) consiste à savoir dans quelle mesure l'indicateur accomplira sa tâche; pour répondre à cela, il est nécessaire de considérer le monitorage foetal comme un test diagnostique et d'explorer ses propriétés, sa sensibilité, sa spécificité et ses capacités de prédiction. Le second aspect (b) consiste à déterminer si, malgré ses forces et ses faiblesses, le monitorage foetal utilisé comme test diagnostique s'est avéré assez utile pour influer sur l'issue de la grossesse.

Dans des conditions de test idéales, la précision devrait être de 100%, sans qu'il y ait de fausses positives ou de fausses négatives lorsque le test est jaugé contre un étalon parfait.

L'étalon parfait utilisé dans la majorité des publications a été un indice d'Apgar faible (<7) et, à l'occasion, la mort périnatale. Parfois, l'indice d'Apgar a été associé au pH du cuir chevelu.

Les essais cliniques randomisés

À cause de l'utilisation de groupes comparables, les quatre essais cliniques randomisés ne se sont pas préoccupés du problème de la précision, mais sont allés directement au deuxième aspect des résultats.

Les études de cohorte

Les études de cohorte, elles aussi, se sont intéressées à la comparabilité des résultats et non au test lui-même.

Les études descriptives (les séries de cas)

Le tableau suivant résume les publications classées selon un ordre chronologique décroissant:

l'indice d'Apgar <7

Publications révisées	n	Valeur de prédiction positive	Valeur de prédiction négative	Sensibilité	Spécificité
1. Westgren et al.	5037	NC	NC	NC	NC
2. Phillips et al.	37	"	"	"	"
3. Liu et al.	50	"	"	"	"
4. Goodlin et al.	1100	"	"	"	"
5. Nochimson et al.	?	"	"	"	"
6. Amato	3076	"	"	"	"
7. Lee et al.	?	"	"	"	"
8. Saldana	620	23.0	86.2	70.6	43.7
9. Chik et al.	61	22.6	79.3	87.5	47.8
10. Tejani et al.	200	27.4	91.4	74.3	58.2
11. Tutela et al.	608	NC	NC	NC	NC

l'indice d'Apgar < 7 (suite)

Publications révisées	n	Valeur de prédiction positive	Valeur de prédiction négative	Sensibilité	Spécificité
12. Edington et al.	911	NC	NC	NC	NC
13. Shenker et al.	760	39.0	77.8	53.4	66.2
	413	16.4	90.4	38.3	67.5
	1566	15.4	90.2	44.8	74.7
14. Thomas	946	NC	NC	NC	NC
15. Sturbois		68.4	91.4	76.5	87.6
	131	51.3	84.8	58.8	80.4
		52.8	84.2	55.9	82.5
16. Gabert et al.	396	NC	NC	NC	NC
17. Kelly et al.	150	"	"	"	"
18. Gabert et al.	749	66.2	91.4	84.3	79.5
19. Shenker	1000	24.5	89.7	68.4	56.6
20. Schifrin et al.	307	42.9	93.0	53.9	89.6
21. Paul	1798	NC	NC	NC	NC
22. Paul et al.	245	"	"	"	"

Pourquoi existe-t-il une telle différence dans les prédictions? La principale contribution à la variabilité des taux de prédictions est le biais du transfert. Il est impossible de trouver des détails de la population étudiée, sauf que, pour la plupart, les articles mentionnent qu'il s'agit de patientes à risque élevé, ont ainsi définies d'après les propres critères des auteurs. Ont fait exception l'équipe de Westgren (#1) qui a étudié les risques faibles et l'équipe Amato (#6) qui a étudié un hôpital communautaire.

Ces résultats sont troublants: à une ou deux exceptions près, la plupart des auteurs ont été des partisans optimistes et enthousiastes du monitorage, malgré des valeurs de prédiction positives tombant jusqu'à 15%. L'extrapolation logique de ces résultats est encore plus troublante. Étant donné que les publications à faible valeur de prédiction ont toutes étudié les populations à risque élevé, avec une prévalence élevée d'issues médiocres, on peut en conclure que les choses ne peuvent qu'empirer si le monitorage est effectué chez une population "normale", étant donné qu'une prévalence plus faible entraînera l'identification d'un plus grand nombre de fausses positives.

D'autre part, les valeurs de prédiction négatives élevées qui ont été universellement atteintes sont rassurantes. Ceci indique que si les tracés du rythme du coeur foetal sont normaux, on peut estimer avec un degré raisonnable de confiance qu'on est en présence d'un foetus normal.

Le tableau qui suit et qui résume les principes directeurs méthodologiques établis pour un test diagnostique, ainsi que la façon dont les chercheurs s'y sont conformés, permettra de mieux comprendre ces problèmes. (Voir le tableau de la page 105).

Les biais: Le standard parfait

L'indice d'Apgar utilisé comme standard parfait (le meilleur devis estimatif présentement disponible) peut ne pas être la meilleure mesure de la souffrance foetale. En effet, la mortalité périnatale se prête mieux à des estimations basées sur de petits échantillonnages.

L'échantillonnage des patientes qui inclut le spectre de la maladie

La plupart des populations étudiées ont été des populations "à risque élevé" (selon une variété de critères) ou à faible risque, mais l'une d'elles seulement a été choisie dans un hôpital communautaire. C'est pourquoi, les caractéristiques de ce test ne peuvent être généralisées.

Test diagnostique

ESSAIS CLINIQUES RANDOMISÉS	Standard parfait	Échantillonnage des patientes	Lieu de l'étude/transfert	Précision/Variation	Définition de la normale	Description de la technique utilisée	Utilité du test évaluée	Propriétés étudiées	Pourcentage des patientes soumises au monitorage
Haverkamp	X		X	X	X	X			
Kelso	X		X		X	X			
Renon	X		X						
Haverkamp	X		X		X	X			
ÉTUDES DE COHORTES									
Krebs	X	X			X	X	X	X	
Paul	X		X						
ÉTUDES DESCRIPTIVES									
Westgren	X		X						
Phillips	X				X				
Liu	X				X				
Goodlin	X		X		X				
Nochimson	X				X	X			
Amato	X	X							
Lee	X		X		X				
Chik	X				X	X			
Tejani	X					X			
Tutela	X					X			
Edington	X		X		X				
Shenker	X				X	X			
Thomas	X				X				
Sturbois	X				X	X	X	X	
Gabert	X								
Kelly	X								
Gabert	X	X				X	X		
Shenker	X								
Shifrin	X				X	X	X	X	
Paul	X					X			

Échantillonnage de l'étude/Schéma du transfert

Non seulement le schéma du transfert affecte-t-il l'issue, mais il contribue également à donner au test une "apparence" de précision lorsque seules les patientes à risque élevé sont incluses, ou une "apparence" de médiocrité lorsque seules les patientes à risque faible sont choisies. Le second point est le pourcentage des patientes choisies pour le monitorage. Dans un grand nombre de publications, il est question d'un petit groupe de patientes, peut-être soigneusement sélectionnées.

Précision/Variabilité

Un seul article fait état de l'accord des observateurs; il s'agit de l'étude clinique d'Haverkamp. Dans n'importe quelle grande série, s'il y a eu variabilité intra et inter-observateurs, on peut sous ou surestimer la valeur du test.

La définition de la normale

Si la notion de normale/anormale n'est pas définie, l'utilité des résultats ne peut être évaluée.

Technique du test

Le même commentaire s'applique à la description du test. Certains articles renferment des détails utiles, d'autres ne contiennent que la mention "soumis au monitorage".

Utilité du test

Cet aspect a été très peu documenté. Le biais qui en résulte peut se traduire par une importance exagérée accordée à l'utilité du test, et soulever de faux espoirs lors de l'interprétation des résultats.

Propriétés

Il est surprenant de constater combien les tenants du monitorage étaient complètement inconscients de ce que leurs résultats montraient.

La plupart ne s'étaient pas préoccupés des problèmes des fausses positives et des fausses négatives ou s'en étaient préoccupés mais les avaient jugés non pertinents. Le biais de l'interprétation est fort.

Question 3: QUI IDENTIFIE LE MARQUEUR?

La plupart des publications ont signalé le fait que le personnel est formé à la fois pour faire fonctionner l'appareil et lire les tracés. Dans l'une des publications, les auteurs ont même rapporté que leur unité comporte une section consacrée aux soins intensifs du foetus, dans laquelle une "équipe de monitorage" effectue tout le monitorage intrapartum, et ils considèrent cet arrangement comme essentiel.

Dans quelle mesure les tracés sont-ils bien lus? Le second essai d'Haverkamp rapporte que l'accord entre les observateurs était de 90%; cependant, un article consacré à l'évaluation des tracés écrit par Trimbos et Kierse donne un autre son de cloche. Dans l'étude de ces deux chercheurs, 100 tracés ont été présentés deux fois à cinq lecteurs, d'une façon aléatoire, et cinq composantes ont été évaluées: le rythme cardiaque basal; l'amplitude et la fréquence de l'oscillation; l'accélération et la décélération, et un sixième indice, l'indice de Fischer assignait 0, 1, 2, à chacune des cinq composantes donnant des scores allant de: zéro à 10. Voici les résultats obtenus:

Accord	Rythme cardiaque basal		Amplitude de l'oscillation		Fréquence de l'oscillation		Accélération		Décélération		Indice de Fischer	
Tous 5	96	96	40	37	47	47	34	69	65	71	47	64
1 et 4	1	2	35	42	38	20	29	22	16	15	25	25
2 et 3	2	2	24	20	12	16	25	7	13	8	27	9
3,1,1, ou 2,2,1	-	-	1	1	3	-	12	2	6	6	1	2

Les accélérations ont été tellement variables qu'il a fallu les redéfinir en termes d'amplitude et de durée. Dans 7 à 13% des cas, on a estimé que les résultats justifiaient une intervention immédiate, mais les tracés sont revenus à la normale à la deuxième lecture.

L'article conclut que l'interprétation des cardiotocogrammes n'est pas aussi facilement reproductible qu'on le souhaiterait.

Question 4: QUELS SONT LES COÛTS DU MONITORAGE DU COEUR FOETAL?

Dans leur article sur l'évaluation des coûts et des avantages du monitorage électronique foetal, Banta et Thatcher ont considéré à la fois les coûts directs et indirects et leur évaluation est jugée prudente. Le coût direct du monitorage foetal porte sur le fonctionnement des appareils; cependant, la morbidité néonatale et maternelle due au monitorage est considérée comme une composante, ainsi que le coût direct et indirect des césariennes. Il est difficile de juger dans quelle mesure les coûts sont bien évalués, mais on estime qu'ils sont d'environ $411 millions par année aux États-Unis.

Dans d'autres articles, les auteurs ont tenté d'évaluer le coût monétaire, mais ils n'ont pas calculé le nombre d'appareils que nécessiterait un monitorage à 100%. Les estimations de ce que devrait être le rapport moniteur/patientes varient, allant de un moniteur pour 300 patientes à un moniteur pour 500 patientes.

Les coûts médicaux sont mieux documentés. Les quatre essais cliniques randomisés indiquent un taux accru de césariennes, et ceux d'Haverkamp établissent ce taux au double de celui d'un groupe ausculté.

Les rapports des études descriptives ont indiqué des taux variables de césariennes. La plupart laissent penser que ce taux est resté le même, d'autres affirment qu'il a diminué; un ou deux signalent qu'il a augmenté. Malheureusement, sans les contrôles appropriés, l'estimation est difficile.

Il peut exister d'autres coûts médicaux pour la mère; des lacérations chez la mère ou dans le placenta ou encore la perforation de l'utérus, mais de tels cas n'ont été que rarement rapportés. Les coûts pour le foetus incluent les lacérations du cuir chevelu (l'hémorragie

survenant dans 0,3% des cas) et les abcès du cuir chevelu. Dans le cas d'une amniotomie, il peut y avoir un prolapsus du cordon ombilical. D'autres séquelles plus graves peuvent se produire, mais elles sont rares.

La césarienne peut représenter un risque pour le poumon du foetus mais l'importance de ce risque n'a guère été évaluée.

Question 5: QUELS SONT LES AVANTAGES DU MONITORAGE DU COEUR FOETAL?

La meilleure preuve a été fournie par les essais cliniques parce que les patientes avaient des chances égales d'être auscultées ou suivies par monitorage. Sur les quatre essais, trois n'ont signalé aucun avantage, mais le quatrième a été arrêté parce qu'on a pensé que le monitorage s'était avéré supérieur. Malheureusement, le quatrième essai avait comporté des analyses fréquentes de données mais sans un ensemble de règles d'arrêt établies "a priori".

Les études de cohorte, comme les études descriptives, ont enregistré une baisse de la mortalité néonatale et périnatale. La plupart ont également enregistré des indices d'Apgar similaires, et un petit nombre des indices d'Apgar faibles. L'absence de groupes véritablement comparables rend ces affirmations impossibles à vérifier.

Question 6: QUELS SONT LES COÛTS PSYCHOLOGIQUES POUR LA MÈRE?

Certaines femmes se sont plaintes d'anxiété et d'inconfort lors de l'insertion des électrodes, mais elles ont souvent trouvé le monitorage rassurant. Un rapport, celui de Starkman, énumère les sentiments de 35 femmes qui ont subi le monitorage. Deux d'entre elles qui avaient déjà perdu un foetus n'y voyaient que des avantages; celles "à faible risque" ou qui n'avaient jamais subi ce genre de perte, étaient pour la plupart contre cette technique.

RÉSUMÉ

Quelles conclusions peut-on tirer de ces preuves contradictoires? On trouvera ci-dessous une série de citations provenant des rapports évalués, suivie par une liste des recommandations contenues dans le rapport publié par le Groupe de travail sur l'élaboration d'un accord (groupe qui relève de l'Institut national pour la santé et le développement de l'enfant) et intitulé "Predictors of Intrapartum Fetal Distress - The Role of Electronic Fetal Monitoring".

Les citations:

Paul (1974): "Pour évaluer parfaitement le monitorage foetal, il faut une étude obstétricale bien conçue ainsi que des études exhaustives sur la croissance et le développement de l'enfant."

Kelso (1976): "Rien ne démontre les avantages ou les désavantages d'un monitorage continu du coeur foetal."

Renou (1976): "Il faut un personnel parfaitement entraîné à cette technique."

Westgren (1980): "Les schémas du rythme du coeur foetal sont irréprochables dans moins de 50% des tracés. Ceci peut induire en erreur les cliniciens et les inciter à prendre des mesures inutiles." (Il serait en faveur du monitorage du rythme du coeur foetal mais le verrait plutôt comme un moyen de dépistage plutôt qu'un test diagnostique.)

Goodlin (1977): "Un prolapsus du cordon et un décollement prématuré du placenta normalement incéré ont été diagnostiqués, non par le monitorage du rythme du coeur foetal, mais grâce aux soins infirmiers."

Amato (1977): "On a constaté des différences, mais elles se sont habituellement manifestées chez les enfants de faible poids de naissance. Au-dessus de 2500 grammes, les différences disparaissent." (Ceci peut expliquer le fait que les essais cliniques d'Haverkamp n'aient pas montré de différences - il ne pratiquait le monitorage que sur les sujets dont l'âge gestationnel dépassait 34 semaines.)

Lee (1976): "Le monitorage foetal peut permettre de prédire une issue favorable mais il semble exagérer les problèmes."

Tutera (1975): "Des difficultés techniques et des complications peuvent survenir."

Edington (1975): "Dans 20% des cas, le monitorage du coeur foetal ne réussit pas à prédire une issue défavorable." (Cet argument a aussi été soulevé par Paul dans l'un de ses rapports qui exposait les raisons physiologiques et biologiques susceptibles de faire échouer le monitorage intrapartum - contractions utérines imprévisibles, position du cordon ombilical, etc.).

Shenker (1975): "Statistiquement, pour prédire l'indice faible d'APGAR à une minute, la méthode d'accouchement est presqu'aussi juste que les tracés du monitorage."

Thomas (1975): "Les décélérations tardives sont fréquemment temporaires et sans gravité." Le monitorage est un bon moyen de dépistage mais non un moyen diagnostique.

Le Groupe de travail sur l'élaboration d'un accord

Les recommandations, pour la pratique clinique courante, sont les suivantes:

1. Le monitorage électronique foetal ou toute autre technique ne doit jamais remplacer un jugement clinique. Le monitorage électronique foetal n'est qu'un des moyens d'évaluation du foetus.

2. L'usage approprié de l'auscultation intermittente et du monitorage électronique foetal continu, chez les patientes à risque élevé et à risque faible, devrait être précédé d'une discussion avec la patiente au sujet de ses désirs, de ses préoccupations, et des questions ayant trait aux avantages, aux limites et aux risques du monitorage foetal. Les femmes devraient avoir la possibilité de

discuter de l'utilisation de toutes les formes de monitorage, pendant les cours prénatals et, de nouveau, au moment de leur admission à la salle de travail.

3. L'auscultation périodique du rythme du coeur foetal est un moyen acceptable d'évaluer l'état foetal dans les cas où le risque de souffrance foetale intrapartum est faible. Pour pouvoir interpréter les données de l'auscultation du rythme cardiaque foetal, il faut comprendre la relation qui existe entre les changements du RCF et les contractions utérines. Bien que le Groupe de travail n'ait aucune preuve que le monitorage électronique foetal diminue la morbidité et la mortalité dans le cas des patientes à "risque faible", il reconnaît que, dans certaines circonstances, ces patientes ou leurs médecins peuvent choisir d'utiliser cette technique.

4. L'utilisation du monitorage électronique foetal doit être sérieusement considéré chez des patientes ayant des grossesses à risque élevé. Par exemple, dans les cas suivants: (a) faible poids de naissance, prématurité, post-maturité, retard de croissance intra-utérine; (b) complications médicales de la grossesse; (c) traces de méconium dans le liquide amniotique; (d) complications obstétricales intrapartum; (e) utilisation de l'oxytocine pendant le travail; et (f) résultats anormaux de l'auscultation.

   Pour chaque patiente, le dossier médical devrait refléter l'évaluation des avantages et des risques du monitorage électronique foetal et la discussion de ses indications avec la patiente.

5. Étant donné que des facteurs inattendus de risque peuvent survenir au cours du travail, même chez des patientes qui auparavant n'avaient pas montré des signes évidents de risque, tous les hôpitaux et centres d'accouchement dispensant des soins de maternité devraient avoir le personnel et l'équipement nécessaires pour évaluer soigneusement l'état du foetus pendant le travail et prendre les mesures qui s'imposent.

6. Pour que le monitorage électronique foetal soit utilisé de façon appropriée, les membres de la profession médicale et d'autres professions devraient, par différentes méthodes didactiques, encourager le personnel responsable des soins à la femme enceinte à bien comprendre les principes et méthodes de l'évaluation du RCF intrapartum. Une attention spéciale doit être accordée aux avantages, aux limites et aux risques de cette technique.

7. La détermination du pH du cuir chevelu foetal comme une adjonction au monitorage électronique du RCF est fortement encouragée.

8. L'utilisation du monitorage doit être accompagnée d'une connaissance des risques potentiels qui s'y rattachent. Le personnel qui place les électrodes sur le cuir chevelu du foetus et le catheter de pression intra-utérine doit s'assurer qu'il utilise des techniques aseptiques et atraumatiques. Il faut de plus éviter de maintenir longtemps la mère en décubitus, et de limiter sans raison sa mobilité.

9. Le personnel hospitalier doit être conscient de l'impact possible du monitorage électronique foetal sur l'accouchement intégré dans une dynamique familiale. Ce type d'accouchement et les indications d'un monitorage foetal électronique intrapartum ne s'excluent pas mutuellement. Les services de maternité devraient être encouragés à considérer le concept de soins intégrés dans une dynamique familiale comme compatibles avec les soins dispensés aux parturientes sous monitorage électronique.

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ANNEXE 5

DOSSIERS PRÉNATALS PROVINCIAUX

PRENATAL RECORD — PART I

BRITISH COLUMBIA

HOSPITAL

1. NAME | RACIAL ORIGIN

ADDRESS | TELEPHONE NUMBER

MOTHER'S AGE | DATE OF BIRTH | OCCUPATION | MARITAL STATUS | DOCTOR'S NAME

FATHER'S NAME | RACIAL ORIGIN

FATHER'S AGE | FATHER'S OCCUPATION | M.S.P. NUMBER | DOCTOR'S PHONE NUMBER

2. OBSTETRICAL HISTORY INCLUDING ABORTIONS

DATE	PLACE OF CONFINEMENT OR ABORTION	DUR. PREG.	HOURS OF LABOUR	TYPE OF DELIVERY	COMPLICATIONS MOTHER AND/OR INFANT	CHILD SEX	CHILD BIRTH WEIGHT	CHILD PRESENT HEALTH

3. RISK ASSESSMENT

Reproductive History

- ☐ Age - less than 15, greater than 35
- ☐ Parity 5+
- ☐ Weight - less than 45 kg (<100 lbs.), greater than 90kg (>200 lbs.)
- ☐ Habitual Abortion
- ☐ Stillbirth/Neonatal Death
- ☐ Fetal Anomalies
- ☐ Labour Premature
- ☐ Labour Prolonged
- ☐ Labour precipitous (< 3 hours)
- ☐ Difficult Delivery
- ☐ Post p. Hemorrhage, Manual Removal
- ☐ Preeclampsia/Hypertension

Associated Hi Risk Conditions

- ☐ Uterine Surgery or Malformations C-section Cone Biopsy, Cervical Suture, etc.
- ☐ Chronic Renal Disease
- ☐ Diabetes (incl. Gest.)
- ☐ Cardiac Disease & Hypertension
- ☐ Serious Medical, Surgical or Psychiatric Disorders

4. HISTORY OF PRESENT PREGNANCY (Specify)

NO		YES
☐	BLEEDING (Date)	☐
☐	PYREXIA (Date)	☐
☐	RADIATION (Date)	☐
☐	NAUSEA	☐
☐	SMOKING (Query pattern of usage)	☐
☐	ALCOHOL, DRUGS (Query pattern of usage)	☐
☐	OCCUPATIONAL	☐

NUTRITION (24 hour recall) GOOD ☐ FAIR ☐ POOR ☐

5. PAST ILLNESS (Specify)

NO		YES
☐	RENAL	☐
☐	CARDIAC	☐
☐	INFECTIONS	☐
☐	RUBELLA	☐
☐	VENEREAL	☐
☐	ALLERGIES	☐
☐	OPERATIONS	☐
☐	TRANSFUSIONS	☐
☐	OTHERS	☐

6. FAMILY HISTORY (Specify)

NO		YES
☐	DIABETES	☐
☐	CARDIAC	☐
☐	HYPERTENSION	☐
☐	TUBERCULOSIS	☐
☐	TWINS	☐
☐	MALFORMATIONS	☐
☐	OTHERS	☐

7. MENSTRUAL HISTORY

L.M.P. (Date)

E.D.C.

IF UNSURE, CONSIDER EARLY ULTRASOUND

MENSTRUAL CYCLE

8. METHOD OF CONTRACEPTION

(Specify)

DATE OF DISCONTINUANCE

9. CURRENT MEDICATIONS

10. EXAMINATION

DATE | GENERAL CONDITION

HEAD & NECK | B.P. | mm Hg

BREAST & LYMPH NODES

HEART & LUNGS

ABDOMEN

SPINE

VARICES & SKIN

PELVIS NORMAL, ABNORMAL (Describe)

CERVIX CYTOLOGY (Class No.)

OTHER OBSERVATIONS

SIGNATURE | MD

11. TOPICS FOR DISCUSSION AND ADVICE

Alternate Physician(s)	Bowels
Genetic Counselling	Baths
Prenatal Course & Classes	Clothes
Nutrition	Books
Supplements	Breast Care
Wt. Control	Breast Feeding
Exercise	Baby Care
Hosp. Adm. Procedures	Labour Stages
Arrival at Hospital	Rest
Anaes. & Analg.	Smoking
Coitus	Alcohol
	Medications

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PRENATAL RECORD — PART II

HOSPITAL

12. LABORATORY

Blood Group | Proteinuria: Initial / 36-38 Weeks | A.R.T. Test

Rubella HI Titre | Hepatitis Carrier? | Rh Antibody Titre: Dates / Results

Rh Factor

DOCTOR'S NAME

13. RISK FACTORS TO BE ANTICIPATED (PART 1)

	NO	YES	
PREGNANCY	☐	☐	
DELIVERY	☐	☐	
NEWBORN	☐	☐	

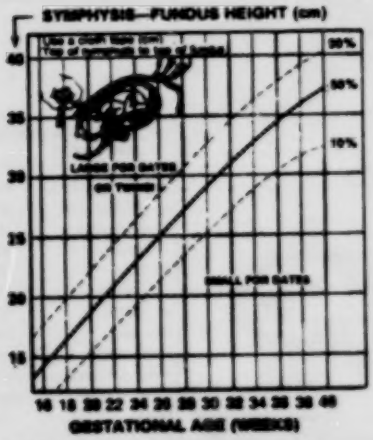
Risk Factors in Present Pregnancy ?

- ☐ Uncertain Dates (after 20 weeks)
- ☐ Poor Weight Gain / Weight Loss
- ☐ Bleeding
- ☐ Anemia < 10 gm %
- ☐ Suspected IUGR
- ☐ Multiple Pregnancy
- ☐ Hydramnios
- ☐ Malpresentation (> 34 weeks)
- ☐ Isoimmunization
- ☐ Hypertension
- ☐ Prolonged Pregnancy (> 42 weeks)
- ☐ Pruritus
- ☐ Premature Rupture Membranes

AGE	GRAV	PARA	ABORTIONS	LIVING CHILDREN	L.M.P.	EDC	DATE OF SUCKLING

DATE	WT	B.P.	URINE	GEST. AGE IN WEEKS	HT. OF FUNDUS CMS.	F.H. & ACTIVITY	PRESENT & POSITION	RISK ASSESSMENT (Low Med High)	MEDICATION REMARKS	RETURN IN

NOTE: SEND HOSPITAL COPIES AT 37 WEEKS



14. PHYSICIAN TO CARE FOR INFANT:

15. SPECIAL INVESTIGATIONS (ULTRA SOUND LABORATORY ETC.) OTHER COMMENTS

PHYSICIAN IN CHARGE OF PATIENT

M.D.

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LABOUR SUMMARY AND DELIVERY RECORD — PART 1

1 GRAV | PARA | ABORTIONS SPONTANEOUS ☐ ELECTIVE ☐

LMP | CYCLE | QUICKENING

EDC SURE ☐ UNSURE ☐ | GESTATION

BLOOD GP | LAST TITRE DATE | LAST HgB DATE | RUBELLA TITRE

2 PREGNANCY SINGLE ☐ TWINS ☐ TRIPLETS ☐ OTHER ☐ SPECIFY

In Multiple Pregnancy specify baby A, B, C, etc. (Use separate form for each baby) ☐

3 ADMISSION TO LABOUR/ DELIVERY AREA Time ____ ____ Date ____ In True Labour ☐ In Suspected Labour ☐ For Induction ☐ For Elective C. Section ☐ Other ☐ Specify

4 HIGH RISK FACTORS BEFORE LABOUR

SCORES (if applicable) – Present Pregnancy – Obstetrical History – Gestational Age TOTAL SCORE ☐

LIST:– _____

5 CONSULTATION OBSTETRIC ☐ NONE ☐ BEFORE LABOUR ☐ DURING LABOUR ☐ AFTER LABOUR — TIME CALLED (Hour) ☐☐☐☐

PEDIATRIC ☐ NONE ☐ BEFORE LABOUR ☐ DURING LABOUR ☐ AT DELIVERY — TIME CALLED (Hour) ☐☐☐☐

6 INDUCTION OR AUGMENTATION OF LABOUR INDUCTION No ☐ Yes ☐ AUGMENTATION No ☐ Yes ☐

METHOD OF INDUCTION OR AUGMENTATION ARM Only ☐ Oxytocin Only ☐ ARM and Oxytocin ☐ Other ☐ Specify _____

RIPENING INFUSIONS No ☐ Yes ☐

INDICATIONS FOR INDUCTION ☐ _____

OR AUGMENTATION ☐ _____

7 FETAL MONITORING – FETAL HEART

Auscultation or other means	No	Yes	Norm	Abnorm
On Admission				
1st Stage				
2nd Stage				

FETAL BLOOD FBS No ☐ Yes ☐ No. of Times ☐ Lowest pH ☐☐☐☐ Cord Blood Gases No ☐ Yes ☐ If Yes, UApH ☐☐☐☐

ELECTRONIC MONITORING (Excluding Doppler) Continuous ☐ Intermittent ☐ TIME FROM ☐☐☐☐ TO ☐☐☐☐

	No	Yes	Ext	Int
FHR				
UP				

8 TIME SUMMARY

	Hour	Day	Month	Year
1st Stage Started				
2nd Stage Started				
Baby Delivered				
Placenta Delivered				
Membranes Ruptured				

	Hours	Minutes
1st Stage		
2nd Stage		
3rd Stage		

Meconium No ☐ Yes ☐

Duration of Ruptured Membranes — Days | Hours | Minutes

9 BABY Unit Number ☐☐☐☐☐☐☐☐☐☐ Admission No. ☐☐☐☐☐☐☐☐☐☐

SEX – Male ☐ Female ☐ Ambiguous ☐ Liveborn ☐ Stillborn ☐

RECORD APGAR SCORE ON REVERSE OF WHITE COPY WEIGHT ☐☐☐☐ GMS GESTATIONAL AGE ☐☐ WEEKS

CONGENITAL MALFORMATIONS No ☐ Yes ☐ Specify _____

10 UMBILICAL CORD: PROLAPSE ☐ OCCULT ☐ TRUE KNOT ☐ LOOPS OF CORD No ☐ Yes ☐ VESSELS 2 ☐ 3 ☐

SPECIFY NUMBER AND SITE OF LOOPS _____

PLACENTA – Normal ☐ Abnormal ☐ Specify _____

WEIGHT ☐☐☐☐ GMS TO PATHOLOGY ☐ CULTURES ☐ OTHER ☐ _____

CORD BLOOD – VD ☐ RH STUDIES ☐ RESERVE ☐ OTHER ☐ _____

DOCTORS PRESENT AT DELIVERY _____

NURSES PRESENT AT DELIVERY _____

SIGNATURE OF ATTENDING NURSE _____ DATE _____

WHITE COPY—MOTHER'S CHART YELLOW COPY—INFANT'S CHART PINK COPY—PHYSICIAN'S COPY

LABOUR SUMMARY AND DELIVERY RECORD — PART 2

11 INDICATIONS FOR OPERATIVE DELIVERY (Enter in Section 15)

- 2nd Stage Delay
  - — Primigravida ≥ 1 hour
  - — Multigravida ≥ ½ hour
- Fetal Distress
  - — Abnormal FHR
  - — Meconium
  - — Acidosis
- Cord Prolapse or Presentation
- Poor Maternal Effort
- Arrest in 2nd Stage
  - — Transverse
  - — POP
- Failed Trial of Forceps
- Disproportion
- Excessive Fetal Size
- Prolonged Labour
- Incoord Uterine Action
- Cervical Dystocia
- Malpresentation
  - — Breech
  - — Face/Brow
  - — Shoulder, etc.
- Unstable Lie
- IUGR
- APH
  - — Abruptio
  - — Plac Praevia
  - — Undiag Haem.
- Cardiac Disease
- Pre-Eclampsia/Eclampsia
- Hypertension
- Diabetes
- Renal Disease
- Immunization
  - — Rh, etc.
- Multiple Pregnancy
- Elderly Primigravida
- Congenital Malforms.
- Known Fetal Anomaly
- Prev. Uterine Surgery
  - — C Section (Repeat)
  - — Myomectomy
  - — Hysterotomy
- Prev. Surgery of Lower Genital Tract
- Infections (Herpes, Chorioamnionitis, etc.
- Other

THIS RECORD FOR BABY ____ (A, B, C etc)

12 ANALGESIA DURING LABOUR

NARCOTIC No ☐ Yes ☐

Epidural Catheter ☐ Nitrous Oxide ☐

Other ☐ Specify _____

MEDICATION	IV/IM	DOSE	TIME	DATE

13 ANAESTHESIA DURING DELIVERY Nitrous Oxide ☐ General Anaesthetic ☐ Spinal ☐ Epidural ☐ Pudendal ☐ Local Perineal ☐

Other ☐ Specify

14 HIGH RISK FACTORS DURING LABOUR AND DELIVERY

- Meconium ☐
- FHR Abnormal 1st Stage ☐
- FHR Abnormal 2nd Stage ☐
- Cord Complications ☐
- Intrapartum Hypertension ☐
- Intrapartum Eclampsia ☐
- Intrapartum Haemorrhage ☐
- Intrapartum Infection ☐
- Multiple Pregnancy ☐
- Malpresentation ☐
- Prolonged ROM ☐
- Prolonged Labour ☐
- Feto Pelvic Disproportion ☐
- Prolonged 2nd Stage ☐
- Fetal pH < 7.25 ☐
- UApH < 7.20 ☐
- Other ☐ _____
- None ☐

15 DELIVERY

PRESENTATION AND POSITION — During Labour _____ At Delivery _____

Type	Spontaneous Vaginal ☐	Ventouse Extraction ☐	Shoulder Dystocia ☐	
Forceps	Low ☐	Low Mid ☐	Mid ☐	High ☐
	Traction Mild to Mod ☐	Traction Mod to Severe ☐		
	Trial Successful ☐	Trial Failed ☐		
Rotation	Manual & Spontaneous Delivery ☐	Forceps Rotation & Spontaneous Delivery ☐		
	Manual & Forceps Delivery ☐	Forceps Rotation & Forceps Delivery ☐		
Breech	Easy ☐	Moderately Difficult ☐	Difficult ☐	
	Internal Version ☐	Breech Extraction ☐	Forceps to after coming head ☐	
Caesarean Section	Pfannenstiel Incision ☐	Vertical Midline Incision ☐	Paramedian Incision ☐	Tubal ligation ☐
	Low Segment Transverse Incision ☐	Low Segment Vertical Incision ☐	Classical ☐	Inverted-T ☐

OTHER TYPE OF DELIVERY ☐ Specify _____

MANUAL REMOVAL OF PLACENTA No ☐ Yes ☐

INDICATIONS FOR OPERATIVE DELIVERY (To be completed for all Forceps, Rotations, Breech Extractions, Ventouse & Caesarean Sect's.)

List in Order of Priority
1. _____
2. _____
3. _____
4. _____

16 BLOOD LOSS Minimal ☐ Moderate ☐ Excessive ☐

ESTIMATED ☐☐☐☐ CC's OR MEASURED ☐☐☐☐ CC's

PERINEUM Intact ☐ Tear 1 2 3 4 (DEGREE: Definitions on Reverse)

EPISIOTOMY None ☐ Midline ☐ Medio-lateral ☐

Extended into Vagina ☐ Extended in Rectum ☐

Additional Lacerations (Labial, Vaginal, Cervical, etc.) No ☐ Yes ☐

If YES specify _____ Sutured By _____

Suture Pack left in No ☐ Yes ☐ Catherized No ☐ Yes ☐ Catheter left in: No ☐ Yes ☐

Additional Comments and Operative Findings: _____

SIGNATURE OF ATTENDING PHYSICIAN _____ DATE _____

PERINATAL PROGRAMME OF B.C.

000124

NEWBORN RECORD - PART 1

1. HOSPITAL OF BIRTH: | DOCTOR: | CASE NO. | E.D.C. | FATHERS NAME | RACIAL ORIGIN | MOTHERS MAIDEN NAME | UNIT NUMBER | RACIAL ORIGIN

2. **FETAL RISK ASSESSMENT:** | GRAMS

NO PRENATAL RECORD ☐ PRENATAL RISK: None ☐ Yes ☐ _____

NO LABOUR/DELIVERY RECORD ☐ LABOUR/DELIVERY RISK: None ☐ Yes ☐ _____

3. **MATERNAL HISTORY SUMMARY:** | AGE | BLOOD GP. | RH POS. | RH NEG.

Number of previous pregnancies _____

LIVE BIRTHS: Term. _____ Pre-term _____ STILLBIRTHS: Term _____ Pre-term _____ ABORTIONS: Therapeutic _____ Spontaneous _____ NO. OF CHILDREN Living _____ At Home _____

COMMENTS: _____

4. **DELIVERY:** DURATION MEMBRANE RUPTURE ____ Hrs. MECONIUM STAINING: No ☐ Yes ☐ Method of Delivery _____

DATE OF BIRTH _____ Time _____ Hrs. SEX ____ CORD BLOOD SPECIMEN: VDS ☐ Rh ☐ Reserve ☐

COMMENTS: _____

5. **APGAR SCORE**

	0	1	2	1 Min.	5 Min.	10 Min.
Heart Rate	Absent	Under 100	Above 100			
Resp. Effort	Absent	Slow Irregular	Good Crying			
Muscle Tone	Limp	Some flex of Extrem.	Active Motion			
Reflex Irritability	None	Grimace	Crying			
Colour	Blue Pale	Blue Extrem.	All Pink			
TOTAL						

6. **RESUSCITATION:**

No ☐ Yes ☐ By Whom:

Method:	Age (min)	Duration (min)
☐ O_2 Flow		
☐ O_2 Mask & Pressure		
☐ O_2 Endotracheal Tube		
☐ Other		

Comments: _____

7. **EYE PROPHYLAXIS:**

$A_g NO_3$ ☐ Other ☐ _____

Specify: _____

Signature: _____

8. **INFANT IDENTIFIED BY:**

_____

9. **DELIVERY ROOM ASSESSMENT:**

Colour: ☐ Pink ☐ Plethoric ☐ Central Cyanosis ☐ Pale **Skin:** ☐ Vernix ☐ Desquamation ☐ Meconium ☐ Edema ☐ Petechiae

Activity: ☐ Active ☐ Lethargic **Tone:** ☐ Good ☐ Fair ☐ Limp/Floppy **CVS:** Apex Left ☐ Yes ☐ No

Respiratory System: ☐ Normal ☐ Grunting ☐ Retraction ☐ Shallow Respirations ☐ Poor Air Entry ☐ Gasping

Heart Sounds: ☐ Normal ☐ Abnormal **Umbilical Cord:** ☐ Normal ☐ Thick ☐ Thin ☐ Meconium Stained **Vessels:** ☐ 2 ☐ 3

Abdomen: ☐ Normal ☐ Scaphoid ☐ Masses _____

Genitalia: ☐ Female ☐ Male ☐ Ambiguous **Anus:** ☐ Patent ☐ Imperforate

Birth Trauma: ☐ No ☐ Yes _____

Congenital Anomalies: ☐ No ☐ Yes _____

Immediately before Transfer to Nursery: IN O_2: ☐ No ☐ Yes Axillary Temp. _____°C Resp. Rate _____ Heart Rate _____ Voided: ☐ Yes ☐ No

Passed Meconium: ☐ Yes ☐ No **EXAMINER'S SIGNATURE:** _____

10. **TRANSFER TO:**

Transitional Nursery ☐ Regular Nursery ☐ Intensive Care Nursery ☐ Other ☐

Time of Admission to Nursery: _____ Hours Date: _____

11. **EVALUATION OF DEVELOPMENT:** (Growth Curves on Reverse)

Birthweight _____ (Gms) _____ % ILE

Length _____ (Cms) _____ % ILE

Head Circ. _____ (Cms) _____ % ILE

THIS INFANT CLASSIFIED AS:

Small for Gestational Age SGA ☐

Appropriate for Gestational Age AGA ☐

Large for Gestational Age LGA ☐

GESTATION AGE:

By Dates _____ Wks. By Exam _____ Wks.

Method _____

Pre Term (⟨ 37 Completed Weeks – i.e. ⟨ 259 Days) ☐

Term (37 to ⟨ 42 Completed Weeks – 264 to 293 Days) ☐

Post Term (42 Completed Weeks or More – 294 Days or More) ☐

WHITE COPY—INFANT'S CHART YELLOW COPY—MOTHER'S CHART PINK COPY—PHYSICIAN'S COPY

NEWBORN RECORD - PART 2

12. PROCEDURES:

SKIN CARE: No ☐ Yes ☐ _____

CORD CARE: No ☐ Yes ☐ _____

VIT. K ☐

13. THIS INFANT TRANSFERRED TO ANOTHER HOSPITAL:

No ☐ Yes ☐ SPECIFY _____

14. PHYSICAL EXAMINATION: A. Admission B. Discharge

A. Date: _____ B. Date: _____ Axillary Temp. _____ °C Resp. Rate _____ /min. Apex Rate _____ /min.

A	B					
1 ☐	☐	Appearance	7 ☐	☐	Reflexes	13 ☐☐ Skin
2 ☐	☐	Abdomen	8 ☐	☐	Eyes	14 ☐☐ Genitals
3 ☐	☐	Femoral Pulses	9 ☐	☐	E.N.T.	15 ☐☐ Anus
4 ☐	☐	Heart	10 ☐	☐	Head/Neck	16 ☐☐ Trunk/Spine
5 ☐	☐	Lungs	11 ☐	☐	Extremities	17 ☐☐ Cry
6 ☐	☐	Tone	12 ☐	☐	Hips	18 ☐☐ Cong. Anom.

COMMENTS: *(Use Ref. No's.)* _____

(CODE: ☑ = Normal ○ = Abnormality Present *(Describe)*) *Signature: A.* */B.*

15. PROBLEM LIST:

Date Commenced	PROBLEM	Resolved at Time of Discharge Yes/No/Unknown

16. ANY FURTHER PERTINENT INFORMATION:

17. POSSIBLE FOLLOW-UP PROBLEMS: (CODE: ☐ = Problem Present *(describe)*)

A. Socio-Economic
1 ☐ Drug Habituation
2 ☐ Language Problem
3 ☐ Malnutrition
Home Situation:
4 ☐ Single Parent
5 ☐ Working Mother
6 ☐ Poverty
7 ☐ Other Socio-Economic

B. Emotional
8 ☐ Maternal Rejection
9 ☐ Paternal Rejection
10 ☐ Prolonged Maternal/Infant Separation
11 ☐ Maternal Immaturity
12 ☐ Maternal Anxiety State
13 ☐ Maternal Psychosis
14 ☐ Post Partum Depression
15 ☐ Other Emotional

C. Infant
16 ☐ Unresolved Medical Problem
17 ☐ Potential Medical Problem
18 ☐ Other Infant Problem

D. Sibling with Chronic Medical Problem
19 ☐ "SIDS"
20 ☐ Other Chronic Medical Problem

COMMENTS: *(Use Ref. No.)* _____

18. FURTHER PROCEDURES: *(See also Section 12)*

METABOLIC SCREENING TESTS: No ☐ Yes ☐ Specify _____ CORD VDS TEST: Neg. ☐ Pos. ☐ URINALYSIS: Neg. ☐ Pos. ☐

CIRCUMCISION: No ☐ Yes ☐ Date: _____ Method: _____

19. CONSULTATIONS: With:

1. _____
2. _____

20. NEONATAL DEATH: ☐

Date: _____ Time: _____ Hrs.

AUTOPSY: Planned ☐ Requested ☐ Refused ☐

Comments: _____

21. CONDITION ON DISCHARGE:

DISCHARGED ALIVE ☐ Date: _____ Weight _____ GMS

FINAL DIAGNOSIS: _____

DISCHARGED WITH: Mother ☐ Other ☐

Referral to Public Health Nurse: _____

Referral to Dept. of Human Resources: _____

Breast Fed ☐ OR Specify Formula: _____

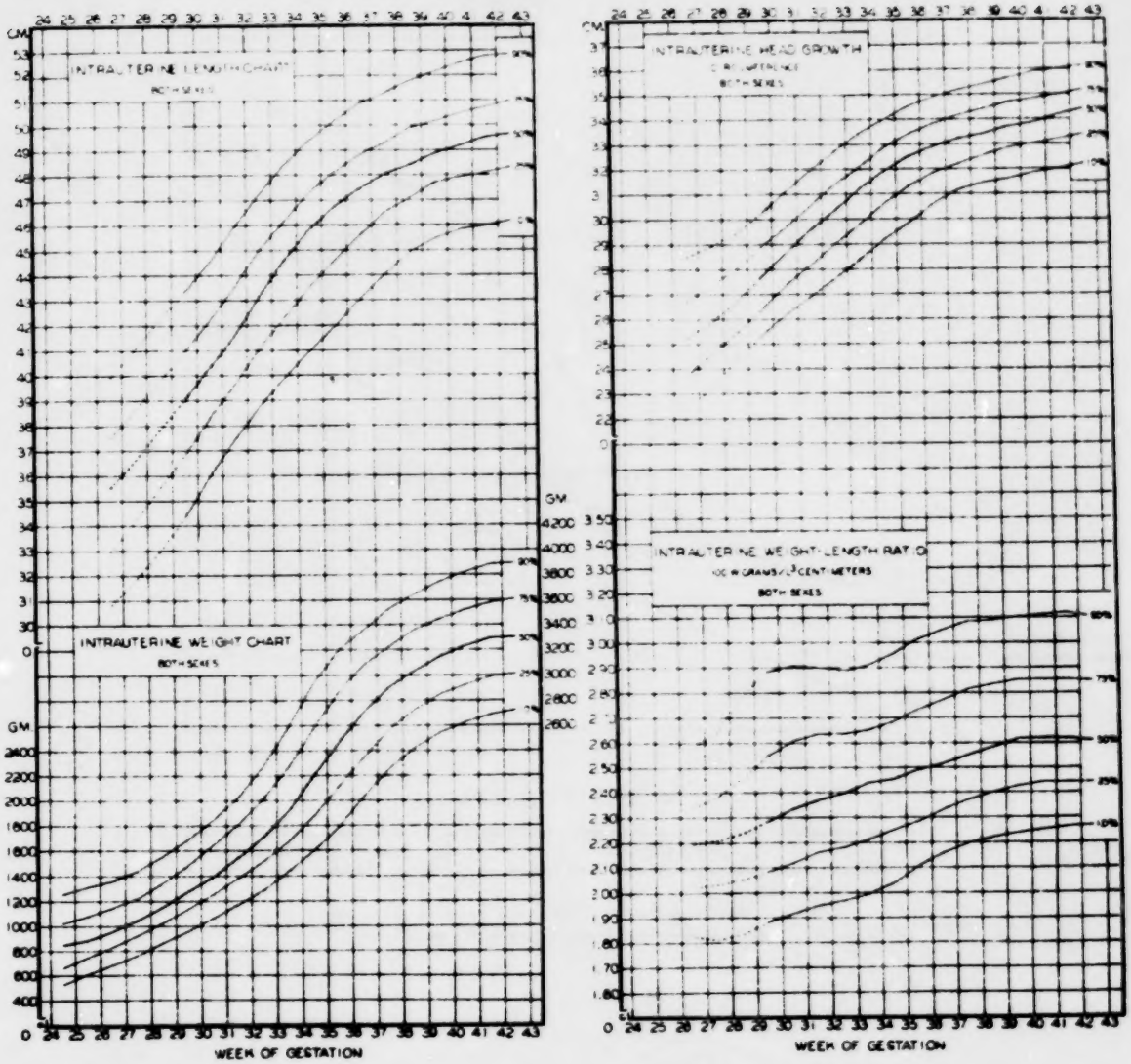
Vitamins ☐ Fluoride ☐ Iron ☐ DISCHARGE MEDICATIONS: *(Specify & state Dose)*

22. DISCHARGED TO THE CARE OF: _____

ATTENDING PHYSICIAN: _____ M.D.

PERINATAL PROGRAMME OF B.C.

INTRAUTERINE GROWTH CHART



LUBCHENCO, L. O., HANSMAN, C. and BOYD, E., Pediatrics, 37:403, 1966

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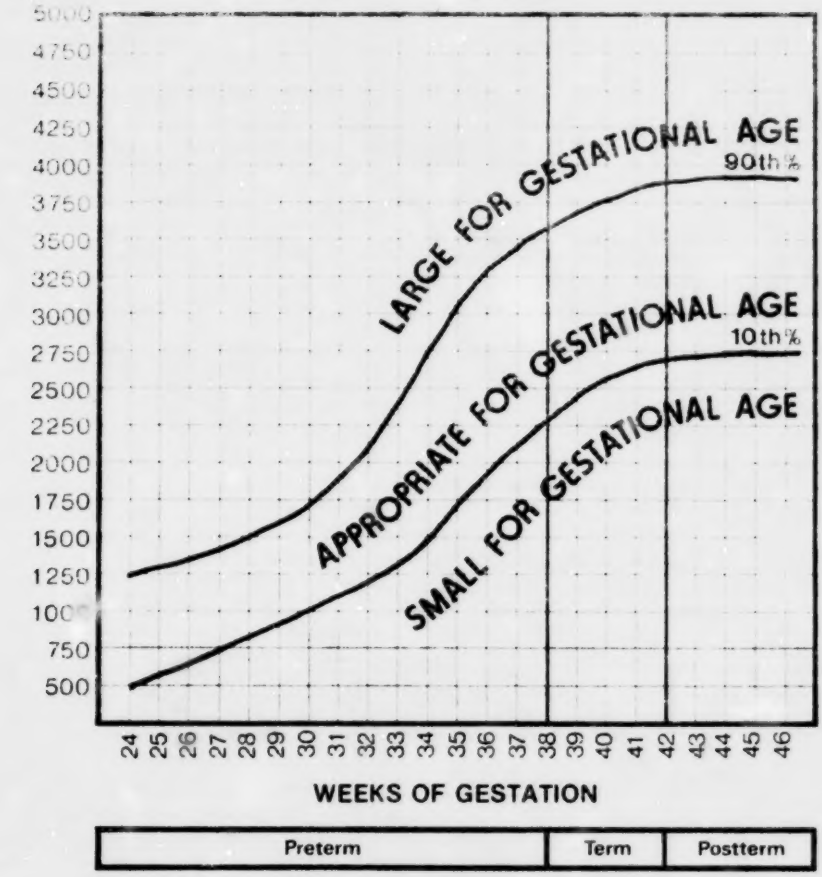
CLASSIFICATION OF NEWBORNS BY BIRTHWEIGHT AND GESTATIONAL AGE



BATTAGLIA, F.C., LUBCHENCO, L.O., Pediatrics, 71:161, 1967

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ALBERTA

ALBERTA PRENATAL RECORD

This record is prepared and revised by the Perinatal Committee of the Alberta Medical Association, printed by the Department of Hospitals and Medical Care and distributed to the hospitals to be available to their doctors.

2 DOCTOR'S COPY
3 HOSPITAL COPY: MOTHER'S CHART
4 HOSPITAL COPY: NEWBORN CHART

000129

A GUIDE TO PREGNANCY RISK

PREGNANCY AT HIGH RISK (10 times the average risk)

Pregnancies which are so complicated that the fetus and/or mother are obviously in danger. If at all possible, these patients should be transferred to a regional perinatal center for intensive care and delivery. Clearly, there are patients who deserve to be placed in this risk category who cannot be transferred safely or in time to benefit the fetus or mother.

Small for dates
Antepartum bleeding > 20 weeks
Twins (large for dates)
Polyhydramnios (Single fetus)
Insulin diabetes
Immaturity (31 weeks or less, > 20 weeks)

PREGNANCY AT RISK

The fetus and/or mother are definitely at risk and consultation should be obtained with a specialist obstetrician in your area. In addition, consultation with an appropriate internist may be necessary. These patients may be managed by continuing collaborative care and deliveries in an obstetrical unit with intermediate level nursing facilities OR they may be returned to the care of the referring physician with a suggested plan of management for the remainder of the pregnancy.

Gestational diabetes
Uncertain dates
Rh. sensitization
Smoking, alcohol, drugs
Rubella
Fever/amnionitis
Abnormal presentation
> 42 weeks (postmaturity)
Preclampsia B.P. > 140/90, proteinuria
Prolonged rupture of membranes
Incompetent cervix
Chronic maternal conditions
(hypertension, heart, renal)

PREGNANCY AT LEAST RISK

Certain dates
No significant medical disease
No significant genetic history
No past pregnancy complications
No previous I.U.G.R. or perinatal mortality

SOME SUGGESTIONS AND INVESTIGATIONS

- Telephone consultation
- Sonar
- Symphysial fundal measurement
- Uninary estriols
- Fetal biophysical profile
- Fetal movement graphs
- Glucose Tolerance Test
- Non stress tests
- Fetal stress tests
- Rh. negative checks at 28, 32, 36 weeks
- X-ray
- Nitrazine speculum examination
- Cultures
- ?
- ?
- ?

000180

PART I

PRENATAL RECORD

DOCTOR'S NAME

NAME M S W D

MAIDEN NAME

ADDRESS

DATE OF FIRST VISIT | TELEPHONE NUMBER

DATE OF BIRTH MOTHER	AGE	OCCUPATION	RELIGION	FATHER OF CHILD	DATE OF BIRTH FATHER	AGE	OCCUPATION	RELIGION

ESTIMATION OF GESTATIONAL AGE — SURE ☐ NOT SURE ☐

L.M.P.

MENSTRUAL HISTORY — CYCLE — DURATION

BIRTH CONTROL (SPECIFY) — DATE DISCONTINUED

Topics for Discussion and Advice

BLEEDING SINCE L.N.M.P.

NO ☐ YES ☐ SPECIFY

Family Obs. History

Genetic Counsell:

INVESTIGATIONS TO CONFIRM DATES

IN WEEKS

UTERINE SIZE AT FIRST VISIT — EXPECTED ☐☐ ACTUAL ☐☐

E.D.C.

Prenatal Course and Classes

Nutrition (Vegetarian)

Supplements

Weight Control

Exercise

OBSTETRICAL HISTORY (INCLUDING ABORTIONS)

DATE	PLACE	DURATION PREG.	DURATION LAB.	METH. DEL.	*MATERNAL COMPLICATIONS PREG./IN LAB./POST P.	NEONATAL COMPLIC.	SEX	WEIGHT	PRES. HEALTH

*N.B. POTENTIALLY RECURRENT COMPLICATIONS SUCH AS A.P.H., P.P.H., HYPERTENSION, SMALL FOR DATES, LARGE FOR DATES, AND CESAREAN SECTION. WHEN IN DOUBT WRITE TO PREVIOUS HOSPITAL.

Smoking

Alcohol

Medications

Rest

Coitus

Bowels

Baths

Clothes

Books

PRESENT PREGNANCY

	NO	YES
EXCESS VOMITING	☐	■
ALCOHOL	☐	■
SMOKING	☐	■
DRUG ABUSE	☐	■

CURRENT MEDICATIONS

SPECIFY

FAMILY HISTORY IF YES, SPECIFY

	NO	YES
DIABETES	☐	■
TWINS	☐	■
MALFORMATIONS	☐	■
HEREDITARY DISEASE	☐	■
OTHER	☐	■

SPECIFY

PAST MEDICAL HISTORY IF YES, SPECIFY

	NO	YES
RENAL	☐	■
CARDIAC	☐	■
INFECTIONS	☐	■
INFERTILITY	☐	■
ALLERGIES	☐	■
OPERATIONS	☐	■
TRANSFUSIONS	☐	■
OTHER	☐	■

SPECIFY

EXAMINATION: DATE

GENERAL CONDITION

HEAD & NECK

BREASTS

HEART

LUNGS

ABDOMEN

EXTREMITIES

BIMANUAL VAGINAL

SPECULUM

SPECIFY

DOCTOR'S COPY

000131

PART II

PRENATAL RECORD

NAME

AGE	GRAV	PARA

INITIAL INVESTIGATIONS

HEIGHT	PRE PREG. WEIGHT	ABO	Rh	Hgb	SEROLOGY	RUBELLA TITRE	PAPP SMEAR		DATE OF QUICKENING	L.N.M.P.	E.D.C.

DATE	WGT.	URINE PRO / Sug.	B.P.	GEST. AGE	Fundus (cm)	PRES.	F.H.	REMARKS, MEDICATIONS, ETC.	NEXT VISIT

Topics for Discussion and Advice

Hosp. Adm. Procedures

Arrival at Hospital

Anaes. & Analg.

Labor Stages

Breast Care

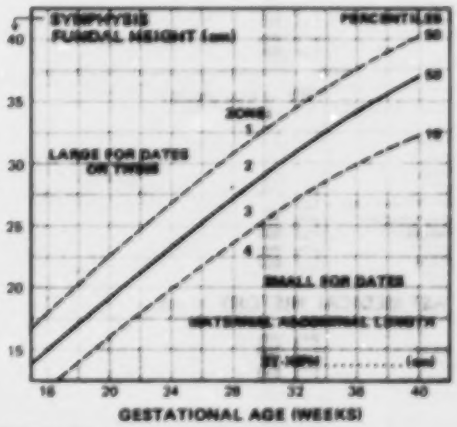
Breast Feed.

Baby Care

RISK FACTORS

HIGH RISK INVESTIGATIONS

DATE					



NOTATIONS FOR DELIVERY/PUERPERIUM

PRENATAL CLASSES ☐

BREAST FEEDING ☐

BABY'S DOCTOR _____

DOCTOR'S SIGNATURE _____

000132

SIDE ONE

PRENATAL FORM

HOSPITAL NO.

HOSPITAL

CASE NO.

DOCTOR

NAME

M S

MAIDEN NAME W D

ADDRESS

TELEPHONE NUMBER	A.H.C.I.C. NUMBER	SOCIAL INSURANCE NO.	DATE OF BIRTH	AGE	OCCUPATION	RELIGION
FATHER OF CHILD		SOCIAL INSURANCE NO.	DATE OF BIRTH	AGE	OCCUPATION	RELIGION

OBSTETRICAL HISTORY INCLUDING ABORTIONS

DATE	PLACE OF CONFINEMENT	DUR. OF PREG. IN WEEKS	HOURS OF LABOUR	TYPE OF DELIVERY	COMPLICATIONS	CHILD		
						SEX	BIRTH WT.	PRESENT HEALTH

MENSTRUAL HISTORY MENARCHE / DURATION / CYCLE / LMP

SURE ☐ NOT SURE ☐ E.D.C.

BIRTH CONTROL (SPECIFY) NONE ☐

DATE OF DISCONTINUANCE

HISTORY OF PRESENT PREGNANCY NAUSEA BREASTS BLEEDING OTHER

EXAMINATION DATE

GENERAL CONDITION

HEAD AND NECK

LYMPH NODES

HEART

LUNGS

BREASTS

ABDOMEN

SPINE

VARICES

BIMANUAL PELVIC EXAM.

SPECULUM INSPECTION

RECTAL

PAP SMEAR

FAMILY HISTORY

DIABETES

CARDIAC

HYPERTENSION

TUBERCULOSIS

TWINS

MALFORMATIONS

PERSONAL HISTORY

PAST ILLNESS

RENAL

CARDIAC

INFECTIONS

RUBELLA

VENEREAL

ALLERGIES

OPERATIONS

TRANSFUSIONS

1. HOSPITAL COPY: MOTHER'S CHART—White
2. HOSPITAL COPY: NEWBORN CHART—Pink
3. DOCTOR'S COPY—Yellow

FROM:
UNIVERSITY OF ALBERTA, EDMONTON, ALTA

000133

NAME

AGE	GRAV	PARA	L M P	E D C	DATE OF QUICKENING

BLOOD			PREVIOUS Rh GLOBULIN	FATHER OF CHILD Rh GENOTYPE	RUBELLA ANTIBODY PRESENT ☐ NOT DETECTABLE ☐	OTHER INVESTIGATIONS (Rh Titre, etc.)	DATE			
STS	ABO GROUP	Rh					FINDINGS			

HEIGHT	PRE-PREG WEIGHT	CYTOLOGY	RISK FACTORS - TO BE ANTICIPATED IN THIS: PREGNANCY, DELIVERY, NEWBORN
CHEST X-RAY			

DATE	DUR. OF PREG. IN WEEKS	FUNDUS IN WEEKS	WT	EDEMA (SITE)	URINE ALB	URINE SUG	B.P.	Hb	PRESENT AND POSITION	F H RATE	ENGAGEMENT	MEDICATIONS, REMARKS	RETURN ON

If albumen is present, it is assumed that catheter or midstream specimen has been tested

CLINICAL ASSESSMENT OF PELVIS	X-RAY REPORTS DATE

PRENATAL CLASSES	ANESTHESIA PREFERRED	PEDIATRICIAN	BREAST FEEDING

SIGNED _____ M.D.

ALBERTA PRENATAL RECORD - Instructions

About fifty percent of perinatal deaths occur before the patient is admitted to hospital and it is likely that morbidity from premature birth and inadequate fetal growth can be reduced by more vigilant prenatal care.

This record has been prepared with the assistance of a widely representative group of physicians in Alberta in order to bring the recent advances in perinatal care into routine use throughout the Province and it is also hoped that the revised record will produce better carbon copies.

The two primary emphases at the first prenatal visit should be:

1. **ESTABLISHMENT OF E.D.C.** — To determine whether the patient is pregnant and, if so, by how many weeks. For this reason the data establishing the E.D.C. are listed first on the record and an attempt is made to arrange the pertinent information on the form in such a way that there is a logical sequence of thought and examination from the stated L.M.N.P. in the top left hand corner of this section to the final estimation of this important date in the bottom right hand corner of this section.

   Menstrual Cycle - Cycle length prior to L.M.P. (greater than 30 days) refers to menstrual pattern within three months of L.M.P.

   Birth Control - Oral contraceptives discontinued with one or two cycles before L.M.P.
   - I.U.C.D. in situ may result in abortion or premature labor but may be removed during pregnancy. Prompt referral is desirable.

   Bleeding - Bleeding since L.M.P. refers to vaginal bleeding in early pregnancy. This can be associated with a molar pregnancy which, if suspected, would suggest estimation of urinary HCG and sonar examination.

   Uncertain Dates - Uncertain dates or lack of correlation between the period of gestation and the actual size of the uterus can lead to problems later in the pregnancy. Pelvic examination should include bi-manual palpation of the uterus.

   Investigations to Confirm Dates
   - Where dates are uncertain every effort should be made to establish gestational age accurately by sonar examination before the twentieth week of pregnancy (or uterine height of 20 cm.)
   - The dates and results of pregnancy tests should be listed in this space.
   - The Perinatal Committee has tried to avoid listing tests and investigations on this record in case this should be construed to mean that the tests were essential in all patients for good care.

2. **ASSESSMENT OF PATIENT'S HISTORIES AND GENERAL HEALTH TO FORECAST THE OUTCOME OF THIS PREGNANCY** — There is little change in this section of the prenatal record from the traditional approach to this assessment.

   Obstetric History - Only the most common recurrent complications are listed on the record but emphasis is placed on writing to the hospital for the case history if there is any doubt about previous adverse obstetric history or illness of the newborn.

   Present Pregnancy - The physiological changes in early pregnancy (nausea, breast changes, urinary frequency, etc.) have been omitted in this section but excessive vomiting requiring treatment should be noted and also smoking, alcohol and the use of non-medical drugs (eg. caffeine) as these lifestyles are known to affect the fetus adversely and are of importance in the care of the newborn. Every effort should be made to encourage the pregnant patient to change these three lifestyles because of the risk to the fetus.

   Current Medications - Any current prescription medication (steroids, insulin, tranquilizers) should be listed.

   Family History - This section has been shortened because a rather general question will usually illicit the pertinent information if the physician suspects there is history of which he should be aware. A history of seizures in the family or birth-damaged siblings, premature births, etc., would encourage a more detailed history.

   Past Medical History - This is not a complete list for the sake of brevity. For example, tuberculosis, veneral disease, and herpes, come collectively under "infections" but should be specified individually.

Physical Examination - The date of this examination should be specified even if it is the same as the date of first visit. Any abnormal findings or pelvic abnormalities should be listed.

Any risk factors identified on this first page should be noted in the RISK FACTOR section on the back of the form and, where necessary, the follow-up indicated e.g. "Dates uncertain" - Sonography (on such-and-such dates).

Repetition

Age
Parity — The back page of the record (Part II) has the patient's name, age, gravida and parity repeated at the top of the page. The usual ages considered at risk are less than 18 years and over 38 years but this depends on multiple factors. The primigravida over 30 years can cause concern. The para 4+ can prove a high risk patient.

Initial Investigations — The initial investigations are listed at the top of the back page so that they are visible at every visit. If the reports on any of these investigations show deviations from the normal, e.g. Rh. antibodies, the follow-up would be in the high-risk boxes at the bottom of the page where the dates of follow-up tests would be planned and arrangements made regarding the father's genotype.

The initial investigations should be repeated at every pregnancy.

Hgb. — The usual column for hemoglobin is omitted because the same recording procedure can be followed as for high risk deviations from the normal: a Hgb. of < 10g. would be checked off as a risk factor and listed in the high risk investigation boxes for treatment and further checks.

Height & Weight — Height and weight are listed together but while women under 5 feet (152 cm.) and under 100 lbs. in weight (45 kgm.) are considered to be at risk, there is still a relevancy in family size (e.g. some immigrants are small people). It is the regular weight gain and the growth of the fetus that will be pertinent in the pregnancy and the weight column is directly below the pre-pregnancy weight for the purpose of watching weight gain. Obese women are at risk.

Date — The first four columns are usually completed by the office nurse.

Urinalysis — If the patient does not bring a specimen, the specimen should be obtained because this check is essential especially in the presence of even a slight increase in blood pressure. More than a trace of proteinuria warrants hospitalization.

Glycosuria in pregnancy should always suggest the presence of gestational diabetes until proved otherwise. Gestational diabetes requires prompt consultation.

Blood Pressure — An increase in blood pressure (diastolic pressure increase of 20 mm. or a diastolic pressure of 90 mm.) requires careful assessment and possible hospitalization. Management of hypertension and/or edema in pregnancy with diuretic drugs on an ambulatory basis has now been proved ineffective because, while relieving the patient's symptoms, this treatment does not improve the basic placental dysfunction which can result in a small-for-dates or dead fetus.

Gestational Age — Once the E.D.C. has been established the weeks of gestation of the pregnancy by dates should be entered on this column.

Fundus (cms.) — Regardless of the gestational age by dates the height of the fundus should be carefully measured in centimetres at each prenatal visit, using a tape measure. The patient should lie flat with one pillow. The fundus is identified, without applying pressure to the abdomen, and the upper edge of the fundus is marked on the abdomen using a pen. The tape measure is then used to record the distance between the upper border of the symphysis pubis and the ink mark on the abdomen. This distance should be entered in the "Fundus" column.

Serial measurements of the size and rate of growth of the uterus are now considered so important in pregnancy that they warrant recording on the graph supplied in the bottom right hand corner of page two. This graph correlates weeks of gestation with the symphysis-fundal measurement. The expected recordings on this graph would be in zones 2 or 3. The dotted lines indicate the 10th and 90th percentiles and recordings above the 90th percentile at two successive visits would warrant a sonar scan (zone 1: twins, large infant, hydramnios, gestational age in doubt). On the other hand, if the uterus is small-for-dates (zone 4) or fails to increase in size between two visits there is a risk of feto-placental dysfunction and fetal growth retardation. This observation at two successive visits would warrant sonar examination and serial tests of feto-placental function after 28 weeks. Where there is inappropriate uterine growth for the gestational age (zone 1 or zone 4) there may also be less than normal fetal activity (less than ten movements during 12 hours on two successive days) and the patient should be asked to report this immediately.

	Where utrauterine growth retardation is suspected serial sonar examination should be done (20, 26, 30, 34 and 38 weeks). The diameter of the fetal trunk should be estimated as well as the biparietal diameter as the ratio of this diameter to the fetal trunk diameter provides the most information in these cases.
	The bottom right hand corner of the ultrasound chart requires the maternal abdominal length from the symphysis-pubis to the xiphoid. Women with short abdominal lengths (37 cm. or less) may have measurements recorded in the lower part of zone 3 or may even fall into zone 4 and give the appearance of being small-for-dates.
Presentation	This column is for use after 34 weeks in case of a malpresentation. The column on "Engagement" was not considered essential and has been omitted.
F.H.R.	This column is narrow and should only require a checkmark. Most doctors do not count the fetal heart beats in normal antenatal patients.
Topics for Discussion	These are marginal reminder notes: the prenatal suggestions on the front page and the labor and delivery factors on the back page.
HIGH RISK FACTORS (Fly sheet in front)	No attempt has been made to include complete lists because these lists are long and space-consuming. A longer check list could be supplied from the Perinatal office on request.
	This half page with the risk factors on the back for constant reminder, may be used to conceal the name and maintain the confidentiality of records when they are in use during the prenatal period, or it may be detached if the doctor so wishes.

Saskatchewan Health

Hospital Services Plan

Prenatal Record

Health 19 42 5 79

Name	Age	Date of Birth
Address		Telephone No.
Father of Child		Date of First Visit
Family Physician	Obstetrician	Pediatrician

Obstetrical History Including Abortions:

Date	Place of Confinement	Dur Preg Wks	Hours of Labour	Type of Delivery	Complications Mother and/or Infant	Child Sex	Child Birth Wt	Child Pres. Health

Past illnesses:	No	Yes	Specify
Renal	☐	☐	
Cardiac	☐	☐	
Infections	☐	☐	
Rubella	☐	☐	
Venereal	☐	☐	
Allergies	☐	☐	
Operations	☐	☐	
Transfusions	☐	☐	
Other	☐	☐	

Family history:	No	Yes	Specify
Diabetes	☐	☐	
Cardiac	☐	☐	
Hypertension	☐	☐	
Tuberculosis	☐	☐	
Twins	☐	☐	
Malformations	☐	☐	
Mental Retardation	☐	☐	
Other	☐	☐	

Menstrual history:

Cycle _____ Duration _____

L.M.P. ____ Normal ☐ Abnormal ☐

Method of contraception:

Date of Discontinuance

Pre-Preg. Weight	Height

History of present pregnancy: Specify

Nausea, Vomiting	No ☐	Yes ☐	
Bleeding	No ☐	Yes ☐	Date:
Fever	No ☐	Yes ☐	Date:
Radiation	No ☐	Yes ☐	Date:
Smoking	No ☐	Yes ☐	Amount:
Drug Use	No ☐	Yes ☐	Identify:
Nutrition	Poor ☐	Good ☐	

Current medications

Examination Date _____

General Condition:

Head & Neck:

Lymph Nodes:

Heart:

Lungs:

Breasts:

Abdomen:

Spine:

Limbs:

Pelvic Examination:

[redacted]

Age 35 +	1 ☐	Rh iso - Immunized Mother	2 ☐
40 +	2 ☐	Pos. History of Erythroblastosis	3 ☐
Para 0	1 ☐		
6 +	2 ☐		
Interval less than 2 years	1 ☐		
Weight 200 lb. +	1 ☐		
Diabetes - Mild, Moderate	2 ☐		
Severe	3 ☐		
Chronic Renal Disease	1 ☐		
with Diminished Renal Function	3 ☐		
Pre-Existing Hypertension			
140 + /90 +	1 ☐		
160 + /110 +	2 ☐		

Previous Obstetrical History

Abortion	☐
Stillbirth	☐
Neonatal Death	☐
Surviving Premature Infant	☐
Antepartum Hemorrhage	☐
Toxemia	☐
Mid-Forceps Delivery	☐
Cesarian Section	☐
Major Congenital Anomaly	☐
Baby 10 lbs. +	☐
One Instance of Above	1 ☐
Two or More Instances of Above	2 ☐

Doctor's Chart

Full Term Deliveries	Premature	Abortions 500 grams or less	Live Births: Surviving 7 days	Live Births: Dying before 7 days	Grav	E.D.C.	Date of Quickening

V.D.R.L.	ABO Group	RH	Father of Child RH Genotype	Rubella Titre	Pap Smear	Notations for Delivery

Fetal Risk Scoring "B" Present Pregnancy (Maximum Score is 3)

e.g. Hydramnios 3

Bleeding, before 20 weeks		Toxemia Mild · Moderate	1
Alone	1	Severe	3
With Pain	2	Hydramnios (Single Fetus)	3
Bleeding, after 20 weeks		Multiple Pregnancy	2
Ceased	1	Abnormal Glucose Tolerance	1
Continues	2	Decreasing Insulin Requirement	3
With Pain	3	Maternal Diabetic Acidosis	3
With Hypotension	3	Maternal Pyrexia	1
Spontaneous Premature Rupture of Membranes	1	Pyrexia + FHR Greater Than 160	2
Latent Period 24 hr +	2	RH Negative	
Anemia 8 to 10 gms	1	With Antibody Titre	2
Less than 8 gms	2	With Amniotic Fluid Liley Zone III	3
No Prenatal Care	2		
1 to 3 Prenatal Visits	1		

C Gestational Age (At time of scoring)

28 Wks. or Under	4	36-37 Wks.	1
29 - 32 Wks.	3	38 - 41 Wks.	0
33 - 35 Wks.	2	42 Wks.	1
		43 Wks. or More	2

Other Investigations

Date	Type	Findings

Prenatal Classes Yes No

Father For Case Room Yes No

Fetal Risk Score (Maximum is 10)

A. Baseline Data [ ] + B + C = Total Score

Evaluation Summary
Score 0 to 2 Low Risk
Score 3 to 6 Moderate Risk
Score > 6 High Risk

Date	Dur. of Preg. in Weeks	Fundus in Weeks	Present # and Position	F.H. Rate	Engagement	B.P.	WT.	Edema	Urine Alb.	Urine Sug.	H.B.	Risk Score	Medications and Remarks	Return On

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PROVINCE OF MANITOBA

OBSTETRICAL RECORD

DATE

WARD

FULL NAME

YEAR OF BIRTH

HOSPITAL NUMBER

PHYSICIAN

NAME | ADDRESS | PHONE

DOCTOR | HOSPITAL | INSURANCE-M.H.S.C.

AGE | MENSES | FILL | L.M.H.P. | E.D.C.

☐ 37 YEARS OR GREATER . AMNIOCENTESIS ☐ DONE ☐ NOT DONE ☐ REFUSED

OBSTETRICAL GRAV. PARA ALIVE

PREMATURE OR < 2500gr. _____ { ALIVE ☐ DEAD ☐ STILLBIRTHS _____

YEAR	WT.	GEST.	COMPLICATIONS	POST PARTUM

PREV. C/S _____

HIGH RISK SCORE — 1ST VISIT — 30 WEEK — ADD/DD ON ADMISSION

ALLERGIES – DRUGS

FAMILY HX CONGENITAL DEFECTS | TB | DIABETES | TWINS | HYPERTENSION | BLEEDING

GENETIC HX

MED. AND SURG. DIABETES | CONN. DX | EPILEPSY | U.T.I.

PRESENT HX MEDICATION | INFECTION | INFERTILITY | SMOKING

ETHNIC GROUP

CAUCASIAN ☐
INDIAN-METIS ☐
ESKIMO ☐
OTHER ☐

EXAMINATION BP | WEIGHT | B.P. | HEIGHT

HEAD AND NECK | BREASTS | PELVIC

HEART | LUNGS | CERVIX

ABDOMEN | EXTREMITIES | CORPUS

ADNEXA

OBSTETRICAL PELVIC ASSESSMENT

PREV. TRANSFUSION YES ☐ NO ☐

HgB

S.T.S.

Rh.

LAB. NO.

IMMUNOGLOBULIN

ANTIBODIES

URINE	P	S	SUGAR	C AND S
CERVIX	H&P			C AND S

SHEVINDEX | DATE

RUBELLA H.I.T.

BLOOD SUGAR

DATE	WT	BP	URINE P / S	SUGAR	FUNDUS	POSITION	FH	HGB AND REMARKS	METHOD IN

LIVED IN CANADA

PRE-NATAL SCORING FORM **PRE-NATAL RECORD**

000140

PRENATAL SCORING FORM

1) Score each question as indicated 2) Total each category score at 1st visit 3) Repeat at 36 weeks 4) Repeat on admission 5) Record on P N sheet

I. REPRODUCTIVE HISTORY

AGE
- <16 = 1
- 16 - 35 = 0
- >35 = 2

PARITY
- 0 = 1
- 1 - 4 = 0
- 5 + = 2

PAST OB HISTORY

- HABITUAL ABORTION/ INFERTILITY = 1
- P P H /MANUAL REMOVAL = 1
- BABY >9 LBS (4082 gm) = 1
- BABY <5½ LBS (2500 gm) = 1
- P.E.T /HYPERTENSION = 1
- PREVIOUS CAESAREAN = 2
- STILLBIRTH OR NEONATAL DEATH = 3
- PROLONGED LABOUR OR DIFFICULT DELIVERY = 1

II. ASSOCIATED CONDITIONS

- PREVIOUS GYNAECOLOGICAL SURGERY = 1
- CHRONIC RENAL DISEASE = 2
- GESTATIONAL DIABETES = 1
- DIABETES MELLITUS = 3
- CARDIAC DISEASE = 3
- OTHER MEDICAL DISORDERS (Chronic bronchitis, Lupus, Etc)
- SCORE ACCORDING TO SEVERITY (1 to 3) =

III. PRESENT PREGNANCY

		1st VISIT	36 WEEKS	ON ADM
BLEEDING				
<20 WEEKS	1			
>20 WEEKS	3			
ANEMIA <10 gm %	1			
PROLONGED PREGNANCY (42 WEEKS)	1			
HYPERTENSION	2			
PREMATURE RUPTURE MEMBRANES	2			
POLYHDRAMNIOS	2			
SMALL FOR DATES	3			
MULTIPLE PREGNANCY	3			
BREECH MALPRESENTATION				
Rh ISOIMMUNIZATION	3			

CATEGORY SCORE _____ + CATEGORY SCORE _____ + CATEGORY SCORE _____

TOTAL RISK SCORE 1st VISIT = ☐ TOTAL AT 36 WEEKS = ☐ TOTAL ON ADMISSION TO HOSPITAL = ☐

(Record scores in box on prenatal sheet)

NOTE: LOW RISK = 0 - 2
HIGH RISK = 3 - 6
EXTREME RISK = 7>

COMMENTS

NOTES

DELIVERY RECORD

TYPE OF LABOUR		INDUCTION	ANAESTHESIA
DATE OF BIRTH	SPONTANEOUS	FORCEPS	THIRD STAGE
HOUR OF BIRTH	WEIGHT	L.B./S.B./H.N.D.	EPISIOTOMY
PRES. POS.	BLOOD LOSS		NURSING
BABY - SEX			
COMPLICATIONS			

DOCTOR'S SIGNATURE

POST PARTUM EXAMINATION

DATE			
WEIGHT	LOCHIA		
B.P.	MENSES		
HAEMOGLOBIN	NURSING	PELVIS	PERINEUM
URINE	BREASTS	CERVIX	CORPUS
FAMILY PLANNING			

)

ONTARIO ANTENATAL RECORD 1

HOSPITAL _____

PRESS HARD
THIS FORM IS IN TRIPLICATE

WHITE - INFANTS CHART
PINK - DOCTOR'S COPY
CANARY - MOTHER'S CHART FORWARD TO HOSPITAL

PATIENT'S NAME

ADDRESS

PHONE# HOME

DATE OF BIRTH | AGE | EDUC. LEVEL | MAR. STATUS

OCCUPATION | PHONE# WORK

FATHER'S NAME | AGE | OCC.

FAMILY PHYS. DOCTOR	OBS. CARE	BABY CARE	INSURANCE OHIP#

LMP (date) | CERTAIN: YES NO

CYCLE | DURATION

TYPE: | DURATION:

LAST USED:

HISTORY OF PREGNANCY

	YES/NO
BLEEDING	
VOMITING	
PYREXIA	
SMOKING (cig/day)	
ALCOHOL	
RADIATION	

GRAVIDA	TERM	PREM	AB.	LIVE	MULTI PREG	Dates / Size

No.	Year	Sex	Gest. Age (wks.)	Birth Wt. (Kg.)	Dur. of Labour	Place of Birth	Type of Delivery	COMMENTS: RE - Pregnancy, Perinatal Death, Abnormality, etc.

SIGNIFICANT MEDICAL HISTORY

	YES/NO	COMMENTS
KIDNEY DIS.		
HEART DIS.		
HYPERTENSION		
DIABETES		
INFECTIONS		
THYROID DIS.		
TRANSFUSIONS		
OPERATIONS		
OTHER		

FAMILY HISTORY

	YES/NO	COMMENTS
HYPERTENSION		
DIABETES		
HEART DIS.		
MULTIPLE BIRTH		
MALFORMATION		
GENETIC DIS.		
EARLY ONSET DEAFNESS		
OTHER		

ALLERGIES

NUTRITION ASSESSMENT

	YES/NO
MILK PRODUCTS	
BREADS & CEREALS	
FRUITS & VEGETABLES	
PROTEIN SOURCES	

HEIGHT | PRE-PREGNANCY WEIGHT | PRESENT WEIGHT | B.P.

CHECK (✓) IF NORMAL

HEAD NECK THYROID	☐	VAGINA	☐
ENT.	☐	CERVIX	☐
TEETH	☐	UTERUS	☐
CHEST	☐	ADNEXA	☐
BREASTS	☐	EXTREMITIES	☐
HEART VASC. SYST.	☐	VARICOSITIES	☐
ABDOMEN	☐	NEUROLOGICAL	☐
VULVA	☐	CYTOLOGY	☐

PELVIC ARCHITECTURE

OTHER:

REMARKS (detail abnormal findings)

DISCUSSION TOPICS
- SMOKING
- ALCOHOL
- DRUG USE
- WORK PLANS
- EXERCISE
- COITUS
- PRENATAL CLASSES
- DENTAL CARE

PHYSICIAN'S SIGNATURE

DATE THIS ATTENDANCE

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ONTARIO
ANTENATAL RECORD 2

PRESS HARD
THIS FORM IS IN TRIPLICATE

WHITE - INFANT'S CHART
PINK - DOCTOR'S COPY
CANARY - MOTHER'S CHART

PATIENT'S NAME

ADDRESS

DOCTORS

RISK FACTORS IDENTIFIED INITIAL VISIT

LMP

E.D.C.

QUICKENING

G P A L

DATE	WT. (lb./Kg.)	G-AGE WK.	S-F HT	PRESN. POSN.	FH	URINE PR	URINE GL	URINE AC	BP	RISK GRADE	LAB	COMMENTS: (OTHER LAB, MEDICATIONS, ETC.)

ADDITIONAL COMMENTS:

ULTRASOUND AND ABNORMAL LABORATORY RESULTS

DIETICIAN

SOCIAL WORKER

DISCUSSED

- NUTRITION
- DIET
- REST
- TRAVEL
- PREM. LABOUR
- BREAST CARE
- ANAES MED.
- TYPE OF DELIVERY
- FATHER AT DELIVERY
- BREAST FEEDING
- ROOM-IN
- CIRCUMCISION
- EARLY DISCHARGE
- CAR SAFETY
- OBSTETRICIAN
- PAEDIATRICIAN

MEASURE SYMPHYSIS-FUNDUS HEIGHT AT EACH ANTENATAL VISIT AND RECORD ON GRAPH OPPOSITE.

PHYSICIAN'S SIGNATURE

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POSTNATAL VISIT

DATE

WEEKS POSTPARTUM: _____

BREAST FEEDING : YES ☐ NO ☐ REASONS FOR DISCONTINUING: _____

_____

PHYSICAL EXAM

WT. _____ kg. B.P. _____ mmHg.

_____

_____

_____

_____

_____

EPISIOTOMY : _____ C. SECTION INCISION: _____

RUBELLA IMMUNE YES ☐ NO ☐ VACCINATED ☐ URINALYSIS: _____

PAP: _____ _____

_____

UNRESOLVED PROBLEMS: _____

_____

_____

ADVICE RE FUTURE PREGNANCIES (EG. CONTRACEPTION, RISK STATUS, REQUIREMENT FOR ULTRASOUND ETC.)

_____

_____

PHYSICIAN'S SIGNATURE _____

A GUIDE TO PREGNANCY RISK GRADING

At each antenatal visit please give your assessment of pregnancy (fetal plus maternal) risk according to the following grading system. The risk factors or problems listed below are intended *as examples only*. Additional space is provided for other risk producing problems which you have identified. This risk grading system is intended as a basis for planning the ongoing management of the pregnancy.

Pregnancy at no predictable risk

- ☐ NO PRIOR PERINATAL MORTALITY OR LOW BIRTHWEIGHT INFANT
- ☐ NO SIGNIFICANT MEDICAL DISEASE
- ☐ NO PREGNANCY COMPLICATIONS NOW OR IN THE PAST (Bleeding, Hypertension, Premature Labour)
- ☐ FETAL GROWTH SEEMS ADEQUATE

Pregnancy at risk

The fetus and/or mother may be at risk and consultation should be considered with a specialist obstetrician in your area. In addition, consultation with an appropriate internist may also be necessary. (These patients may be managed by continuing collaborative care and delivery in an obstetrical unit with intermediate level nursing facilities OR they may be returned to the care of the referring physician with a suggested plan of management for the remainder of the pregnancy).

- ☐ DIABETES, CLASS A (GESTATIONAL) OR CLASS B
- ☐ HYPERTENSION WITHOUT TOXAEMIA
- ☐ APH, CEASED AND IN HOSPITAL
- ☐ CERVICAL INCOMPETENCE
- ☐ HYDRAMNIOS
- ☐ POST - DATE PREGNANCY (42 weeks +)
- ☐ HISTORY OF PRIOR STILL BIRTH OR NEONATAL DEATH OR PREMATURE DELIVERY
- ☐ MATERNAL OBESITY (20% > IDEAL B.WT.)
- ☐ SIGNIFICANT TOBACCO, ALCOHOL, DRUG INTAKE
- ☐ RHESUS IMMUNIZATION
- ☐ PREMATURE RUPTURE OF MEMBRANES 34 WK. OR MORE
- ☐ OTHER SIGNIFICANT MEDICAL ILLNESS
- ☐ RENAL DISEASE WITHOUT HYPERTENSION
- ☐ MILD TOXAEMIA
- ☐ CONTROLLED PREMATURE LABOUR
- ☐ MULTIPLE PREGNANCY
- ☐ BREECH: BEYOND 36 WEEKS
- ☐ PRIMIGRAVIDA (age 35 +)
- ☐ HISTORY OF GENETIC DISEASE IN FAMILY (Genetic Amniocentesis or Counselling required)
- ☐ ANAEMIC NOT RESPONDING TO IRON (< 10gm)
- ☐ WEIGHT GAIN < 10 lbs. BY 30 WEEKS
- ☐ GRAND MULTIPARA (> 5)
- ☐ LARGE FOR DATES
- ☐ PREVIOUS UTERINE SURGERY INCLUDING CAESAREAN SECTION
- ☐ .....

Pregnancy at high risk

Pregnancies which are so complicated that the fetus and/or mother are obviously in danger. If at all possible, these patients should be transferred to a regional perinatal centre (level III) for intensive care and delivery. Clearly, there are patients who deserve to be placed in this risk category (with problems such as excessive antepartum bleeding , cord prolapse, or advanced uncontrolled premature labour) who cannot be transferred safely or in time to benefit the fetus or mother.

- ☐ DIABETES CLASS C, D, F, R OR SIGNIFICANTLY COMPLICATED
- ☐ RENAL DISEASE WITH HYPERTENSION ± ↓FUNCTION
- ☐ PREMATURE RUPTURE OF MEMBRANES (± SEPSIS) *
- ☐ ANTEPARTUM BLEEDING, CONTINUING OR REPEATED *
- ☐ HYPERTENSION WITH SUPERIMPOSED TOXAEMIA
- ☐ EARLY UNCONTROLLED PREMATURE LABOUR *
- ☐ SEVERE FETAL GROWTH ARREST (< 10th Percentile)
- ☐ HEART DISEASE, ESPECIALLY WITH FAILURE
- ☐ .....
- ☐ .....
- ☐ .....
- ☐ .....

* 24 - 34 weeks gestational age.

Two or more minor risk problems can combine to produce a high pregnancy risk. Such a patient may deserve to be placed in a higher risk category.

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DOSSIER PRÉNATAL No 1

APPUYEZ FERMEMENT - Formule en 3 exemplaires

HÔPITAL — SOINS. OBS. — SOINS BÉBÉ

MÉDECIN

NOM DE LA MALADE — RELIGION

AGRESSE

DATE DE NAISSANCE J / M / A — ÂGE — TÉL.

PROFESSION — ORIGINE ETHNIQUE — ETAT CIVIL

NIVEAU D'INSTRUCTION — CNIP NO.

NOM DU PÈRE — DATE DE NAISSANCE — ÂGE — PROF. — SITUATION FAMILIALE

Cycle — Durée
D.M. Normale — Anormale
D.M (date)

Ovule — Arrêt (date)
Durée (années)
Stérilet

Dates J / M / A
Dimensions

D.P.A. revisée J / M / A

PERTES DE SANG
PYREXIE
ALCOOL
MÉDICAMENTS
ALLERGIES

MAL. REINS
HYPERTENSION
INFECTIONS
MAL. THYROÏDE
OPRATIONS

HYPERTENSION
MAL. COEUR
MALFORMATION
MAL. GÉNÉTIQUES

PRODUITS LAITIERS
FRUITS ET LÉGUMES

GAIN - PERTE
ALCOOL
ALLAITEMENT
PLANS TRAV.
CONT

FEUILLE DE LA MÈRE - BLANCHE, FEUILLE DU MÉDECIN - JAUNE, FEUILLE DU BÉBÉ - ROSE

COCHER (✓) SI NORMAL

POITRINE	☐	O.R.L.	☐
TÊTE, COU, THYROÏDE	☐	VULVE	☐
ABDOMEN	☐	COL	☐
VARICES	☐	OVAIRES	☐

DATE DE LA PREMIÈRE VISITE J / M / A

SIGNATURE DU MÉDECIN

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DOSSIER PRÉNATAL No 2

MÉDECIN

NOM DU MALADE

ADRESSE

J / M / A

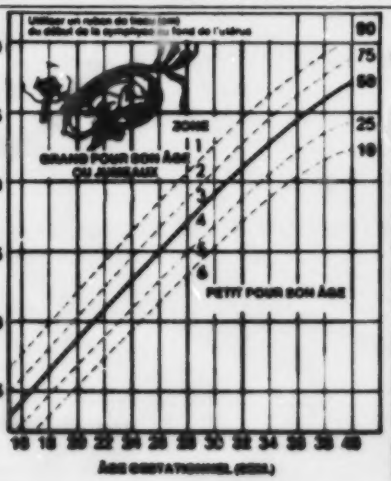
FEUILLE DE LA MÈRE - BLANCHE, FEUILLE DU MÉDECIN - JAUNE, FEUILLE DU BÉBÉ - ROSE

À CHAQUE VISITE PRÉNATALE, INSCRIRE LES CATÉGORIES COURANTES SUSMENTIONNÉES DE RISQUES DE GROSSESSE — A, B ou C — UTILISER CETTE CATÉGORIE POUR LE TRAITEMENT CONTINU DE LA GROSSESSE.

par ex.: C ENVISAGER LE TRANSFERT
B ENVISAGER UNE CONSULTATION

DEUX RISQUES MINEURS OU PLUS COMBINÉS PEUVENT PRODUIRE UN RISQUE SÉRIEUX DE GROSSESSE.

MESURER LA HAUTEUR DE SYMPHYSE-FOND DE L'UTÉRUS À CHAQUE VISITE PRÉNATALE ET L'INSCRIRE SUR LE GRAPHIQUE CI-CONTRE.



NUTRITION	
REPOS	
COURS PRÉNATAUX	
TYPE D'ACCOUCHEMENT	
ALLAITEMENT	
CONSEIL PÉDIATRIQUE	
CONTRÔLE DES NAISSANCES	
PÉDIATRE	

SIGNATURE DU MÉDECIN

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GUIDE DE GRADATION DES RISQUES DE GROSSESSE

A chaque visite prénatale, indiquez votre évaluation des risques de la grossesse (foetus et mère) selon l'échelle de gradation suivante. Les facteurs de risques ou les problèmes énumérés ci-dessous ne sont que des *exemples*. Il reste des blancs où vous pouvez inscrire d'autres problèmes comportant des risques que vous avez relevés. Cette échelle de gradation des risques devrait servir de base à la planification du traitement continu de la grossesse.

CATÉGORIE A Grossesse sans risque prévisible

- ☐ AUCUNE MORTALITÉ PÉRINATALE ANTÉRIEURE OU BÉBÉ DE POIDS INFÉRIEUR
- ☐ AUCUNE MALADIE MÉDICALE IMPORTANTE
- ☐ AUCUNE COMPLICATION DE GROSSESSE MAINTENANT OU AUPARAVANT (Perte de sang, hypertension, travail prématuré)
- ☐ CROISSANCE APPAREMMENT NORMALE DU FOETUS

CATÉGORIE B Grossesse comportant des risques

Le foetus et (ou) la mère sont définitivement susceptibles à des complications et il faut obtenir une consultation d'un spécialiste en obstétrique de votre région. De plus, il faudra peut-être une consultation auprès d'un interniste de la spécialité voulue. On peut traiter ces cas grâce à des soins coopératifs continus dans une unité d'obstétrique où se fera l'accouchement et où existent des installations de soins infirmiers de niveau intermédiaire OU on peut les remettre entre les mains du médecin traitant en lui proposant une conduite à suivre applicable au reste de la grossesse.

- ☐ DIABÈTE, CATÉGORIE A (GESTATIONNEL) OU CATÉGORIE B
- ☐ HYPERTENSION SANS TOXÉMIE
- ☐ HAP, TERMINÉ ET À L'HÔPITAL
- ☐ INCOMPÉTENCE CERVICALE
- ☐ HYDRAMNIOS
- ☐ GROSSESSE PASSÉ TERME (42 semaines +)
- ☐ ANTÉCÉDENTS DE MORTINAISSANCE OU DE DÉCÈS NÉONATAL
- ☐ OBÉSITÉ MATERNELLE
- ☐ USAGE IMPORTANT DE TABAC, D'ALCOOL, DE DROGUES
- ☐ IMMUNISATION AU RHÉSUS
- ☐ .....
- ☐ .....
- ☐ AFFECTION RÉNALE SANS HYPERTENSION
- ☐ TOXÉMIE BÉNIGNE
- ☐ TRAVAIL PRÉMATURÉ CONTRÔLÉ
- ☐ GROSSESSE MULTIPLE
- ☐ PRÉSENTATION PAR LE SIÈGE
- ☐ PRIMIGESTE (âge 35 +)
- ☐ ANTÉCÉDENTS FAMILIAUX DE TROUBLES GÉNÉTIQUES (Amniocentèse génétique ou besoin de consultation)
- ☐ ANÉMIE FERRIPRIVE RÉFRACTAIRE
- ☐ GAIN DE POIDS <10 liv. à 30 semaines
- ☐ GRANDE MULTIPARE
- ☐ .....
- ☐ .....

CATÉGORIE C Grossesse à risque élevé

Grossesses si compliquées que le foetus et (ou) la mère sont manifestement en danger. Si cela est possible, on devrait transférer ces cas à un centre périnatal régional (niveau III) pour soins intensifs et accouchement. De toute évidence, il y a des cas qui méritent d'être classés dans cette catégorie de risques (problèmes de pertes de sang excessives avant parturition, prolapsus du cordon ou travail prématuré avancé non contrôlé) mais qu'on ne peut transférer en sécurité ou à temps pour que ce soit avantageux au foetus ou à la mère.

- ☐ DIABÈTE, CATÉGORIE C, D, F, R OU SUFFISAMMENT COMPLIQUÉ
- ☐ AFFECTION RÉNALE ACCOMPAGNÉE D'HYPERTENSION ±↓FONCTION
- ☐ RUPTURE PRÉMATURÉE DE LA POCHE DES EAUX (± SEPTICÉMIE)*
- ☐ PERTES DE SANG AVANT PARTURITION, CONTINUES OU REPÉTÉES*
- ☐ .....
- ☐ .....
- ☐ HYPERTENSION COMPLIQUÉE DE TOXÉMIE
- ☐ TRAVAIL PRÉMATURÉ NON CONTRÔLÉ*
- ☐ ARRÊT DE CROISSANCE IMPORTANT DU FOETUS (< 10epercentile)
- ☐ TROUBLES CARDIAQUES, SURTOUT AVEC DÉFAILLANCE
- ☐ .....
- ☐ .....

* en particulier 24 à 34 semaines de gestation

La présence de deux risques mineurs ou plus peut produire une grossesse à risque élevé. Il se peut que ces cas méritent d'être dans une catégorie à risque plus élevé.

QUÉBEC

DOSSIER OBSTÉTRICAL
OBSERVATION MÉDICALE

Cadre réservé à l'usage du centre hospitalier

Nom _____

Prénom _____

Adresse _____

_____ N° de téléphone _____

Âge _____ Date de naissance _____

N° d'assurance-maladie _____

ANTÉCÉDENTS FAMILIAUX

Tuberculose, hypertension, cardiopathie, diabète, allergie, cancer, troubles neuro-psychiatriques, grossesses gémellaires, anomalies.

Préciser:

ANTÉCÉDENTS MENSTRUELS

Premières menstruations	Cycle	Durée	D.D.M.	D.P.A.	Méthode anticonceptionnelle	Cessée depuis
ans	jours	jours				

ANTÉCÉDENTS PERSONNELS (✓ : positif O: négatif)

Antécédents éloignés				Antécédents récents (depuis les dernières menstruations)			
Maladies rénales		Phlébites, varices		Nausées		Rougeole — Varicelle	
Maladies cardiaques		Épilepsie		Vomissements		Autres infections virales	
Hypertension artérielle		Allergies aux médicaments		Mauvaise digestion		Irradiations, radiographie	
Rhumatisme articulaire aigu		Allergies		Constipation		Traumatismes	
Tuberculose		Dyscrasies sanguines		Céphalées		Médicaments	
Maladies vénériennes		Incompatibilité Rh ABO		Hémorragies (préciser)		Vaccins	
Maladies gynécologiques		Opérations antérieures		Pertes vaginales (préciser)		Drogues	
Infections virales		Accidents antérieurs		Oedème		Alcool	
Maladies neuro-psychiatriques		Vaccins		Transfusions de sang		Cigarette	
Diabète		Génétique		Douleurs abdominales (préciser)		Travail à l'extérieur	
Affections de la thyroïde		Immunoglobuline anti-D		Symptômes urinaires			

Préciser:

Grossesses antérieures			À terme	Prématurées	Dystociques	Avortements	Enfants morts	Grossesse multiple Grossesse ectopique

N°	Date Jour Mois Année	Centre hospitalier	Durée de la grossesse	Durée du travail	Incidents de l'accouchement	♂ ou ♀	Masse (poids)	Complications Chez la mère	Complications Chez l'enfant
	/ /								
	/ /								
	/ /								
	/ /								
	/ /								
	/ /								
	/ /								

AH-226

MÉDECIN TRAITANT

000150

DOSSIER OBSTÉTRICAL
OBSERVATION MÉDICALE

Nom _____

Prénom _____

Adresse _____

_____ N° de téléphone _____

Âge _____ Date de naissance _____

N° d'assurance-maladie _____

Cadre réservé à l'usage du centre hospitalier

Date d'admission	N° de chambre	N° du dossier médical
Nom	Prénom	
Adresse		
Date de naissance	Sexe	N° de téléphone
Médecin traitant		
N° d'assurance-maladie		

EXAMEN PHYSIQUE

Taille m	Masse (poids) avant la conception kg	Masse (poids) actuelle kg	
Yeux	Dents	Pharynx	Thyroïde
Cou	Peau	Coeur	Poumons
Seins	Mamelons	Tumeurs	
Abdomen		Colonne	
Membres inférieurs	Oedème	Varices	

EXAMEN GYNÉCOLOGIQUE

Vulve			
Vagin			
Périnée			
Col			
Utérus			
		Correspondance entre le volume de l'utérus et l'âge de la grossesse	
Annexes			
Toucher rectal		Cul-de-sac de Douglas	
Pelvimétrie — Clinique	Promontoire	Épines sciatiques	
Pelvimétrie — Radiologique	Oui ☐ Non ☐	Si oui, date	

Dystocie prévue au détroit : supérieur ☐ moyen ☐ inférieur ☐

Cytologie : Oui ☐ Non ☐ Si oui, date

Problèmes spéciaux

Type d'accouchement prévu	Type d'anesthésie prévu	Allaitement maternel prévu

2

_____ Date

_____ Signature

AH-557

MEDECIN TRAITANT

000151

Cadre réservé à l'usage du centre hospitalier

DOSSIER OBSTÉTRICAL

ÉVOLUTION DE LA GROSSESSE

Nom à la naissance _____

Prénom(s) _____

Adresse _____

_____ N° de téléphone _____

Âge _____ Date de naissance _____

N° d'assurance-maladie _____

Nom du conjoint _____

EXAMENS DE LABORATOIRE

B.W. _____ Date _____

Hb _____ Ht _____ Date _____

Groupe et Rh de la mère _____ Anticorps _____ Cytologie _____ Date _____

Urines (sommaire et culture) _____

D.P.A. selon: a m j

1. D.D.M. ⌊_⌋⌊_⌋⌊_⌋⌊_⌋⌊_⌋⌊_⌋

2. clinique ⌊_⌋⌊_⌋⌊_⌋⌊_⌋⌊_⌋⌊_⌋

3. échographie ⌊_⌋⌊_⌋⌊_⌋⌊_⌋⌊_⌋⌊_⌋

Visites prénatales (O: négatif, +: anormal, —: ne s'applique pas) Cours prénatals ☐ oui ☐ non

D.D.M. Date	Semaines de grossesse	Hauteur du fond utérin	Masse (poids) kg	Tension artérielle	Albuminurie	Glycosurie	Cœur fœtal	Nausées / Vomissements	Œdème	Position et présentation	Hémoglobine	Traitements ou remarques (échographie, amniocentèse, oestriol, épreuve de stress, anticorps)	Initiales
a m j				/				/					
				/				/					
				/				/					
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				/				/					

Remarques

3

Cadre réservé à l'usage du centre hospitalier

AH-283 (rév. 10-80)

DOSSIER OBSTÉTRICAL
ÉVOLUTION DU TRAVAIL

Nom de l'établissement ____________________

Date d'admission ____________ heure ____ h ____

Date du début du travail ____________ heure ____ h ____ ☐ spontané ☐ déclenché

Membranes ☐ intactes ☐ rompues ____________ h ________ liquide ________
Date

État de la parturiente à son admission

☐ Rasage
☐ Lavement
☐ Glycosurie
☐ Albuminurie
☐ Hémogramme et groupe sanguin
☐ Culture d'urine

Par.
Ab
Gr.
D.M.
Sem. de gestation
D.P.A.

Médecin prévenu à ________ h ________

Date	Heure (0-24)	T° (°C)	Poids	Tension artérielle	Cœur foetal	Contractions: Fréquence (min.)	Contractions: Durée (en s)	Contractions: Intensité + ++ +++	Membranes I. ou R.	Dilatation (en cm)	Effacement	Station	Ocytocique: Milliunités (par min.)	Ocytocique: Microgouttes (par min.)	Traitements et remarques	Initiales
				/												
				/												
				/												
				/												
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4				/												

DOSSIER MÉDICAL

000153

Cadre réservé à l'usage du centre hospitalier

DOSSIER OBSTÉTRICAL

COURBE DE FRIEDMAN (1)

Nom de l'établissement _____

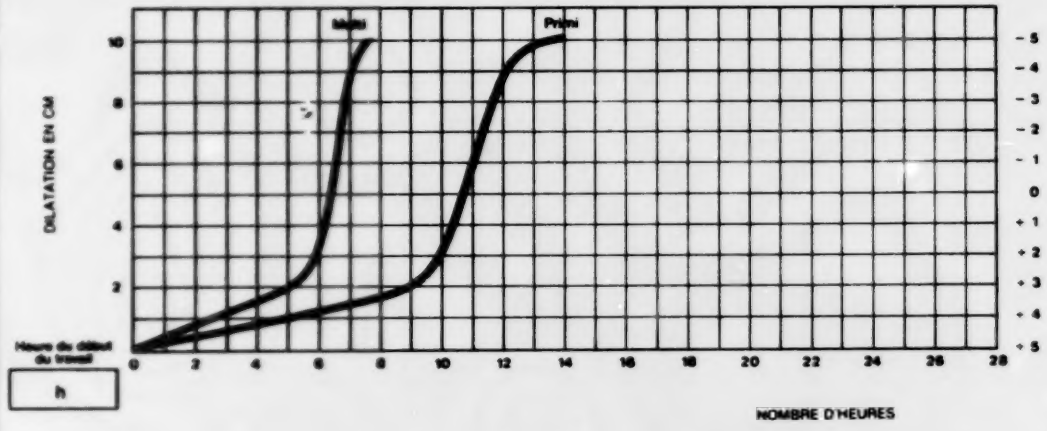
_____

Raison d'admission

☐ Membranes rompues ☐ Travail vrai ☐ Césarienne non urgente

☐ Suspension du travail ☐ Autre _____

☐ Indication du déclenchement _____



(1) Friedman, Emmanuel A. Labor in Multiparas. Extrait de: Obst. & Gynec. vol. 8 n° 6; 1956. p. 696.

Date	Heure	Médication (inscrire la date, l'heure, le nom, la quantité et la voie d'administration)	Initiales
	h		
	h		
	h		
	h		
	h		
	h		
	h		
	h		
	h		
	h		
	h		
	h		

AH-271 (rev. 1988) DOSSIER MÉDICAL

000154

DOSSIER OBSTÉTRICAL
GROSSESSE, TRAVAIL ET ACCOUCHEMENT
ÉVOLUTION DE LA MÈRE ET
ÉVALUATION DU NOUVEAU-NÉ

Cadre réservé à l'usage de centre hospitalier

Nom de l'établissement _____

GROSSESSE, TRAVAIL ET ACCOUCHEMENT

Groupe et Rh

D.D.M. a m j D.P.A a m j Anticorps

Par	Gr.	Ab.	Enfants vivants	Particularités (complications ou diagnostics pendant cette grossesse ou les grossesses antérieures)

Présentation
☐ tête ☐ siège ☐ autre (préciser)

Travail ☐ Spontané ☐ Déclenché

Début du travail a m j _____ h _____

Membranes rompues a m j _____ h _____

1er stade durée _____
2e stade durée _____
3e stade durée _____
durée totale _____

Analgésie durant les 4 dernières heures (médicament, dosage)

Corticostéroïdes (date et heure de la première dose)

Anesthésie
Aucune ☐ Générale ☐ Bloc para-cervical ☐ Épidurale ☐ Bloc honteux ☐ Locale ☐

Accouchement a m j _____ h _____

☐ Par voie vaginale ☐ Par césarienne

☐ TÊTE
- ☐ Spontané
- ☐ Forceps bas
- ☐ Forceps moyens
- ☐ Rotation

☐ SIÈGE
- ☐ Spontané
- ☐ Assisté
- ☐ Forceps

- ☐ Itérative
- ☐ Transversale basse
- ☐ Médiane basse
- ☐ Classique
- ☐ Hystérectomie

Indication de la césarienne

Épisiotomie Aucune ☐ Médiane ☐ Médio-latérale ☐

Déchirure
Aucune ☐ Périnéale 1 2 3 4 ☐ Cervicale ☐ Vaginale ☐ Pertes sanguines _____ ml

Cordon ombilical
Clampage
- ☐ < 45 secondes après l'accouchement
- ☐ > 45 secondes après l'accouchement

Circulaires
- ☐ Lâches
- ☐ Serrés
- ☐ Coupés pendant l'accouchement
- ☐ Coupés après l'accouchement

Placenta Masse _____ g
- ☐ Évacuation spontanée
- ☐ Évacuation manuelle
- ☐ Vaisseaux ombilicaux 2 3

Anomalies

Complications
Aucune ☐ Méconium ☐ Détresse foetale ☐

Cœur foetal
- ☐ < 120
- ☐ 120 à 160 ☐ Irrégulier ☐ Inaudible
- ☐ > 160

Monitorage
- ☐ clinique
- ☐ externe
- ☐ interne

Signature du médecin | Date

ÉVALUATION DU NOUVEAU-NÉ

Sexe ☐ ♂ ☐ ♀ ☐ Vivant ☐ Mort-né Masse _____ g

☐ Gouttes ophtalmiques ☐ Vitamine K ☐ Ondoyé

Alimentation ☐ Maternelle ☐ Artificielle ☐ homo. ☐ humanisé

Réanimation ☐ oui ☐ non

Ventilation ☐ Avec sac et masque ☐ Tube trachéal _____ min.

☐ Aspiration trachéale

Asphyxie ☐ Aucune ☐ Modérée ☐ Importante

☐ Anomalies
☐ Complications

Spécifier:

Parents informés ☐ oui ☐ non

APGAR	0	1	2	1 min.	5 min.	10 min.
Battements cardiaques	Absents	Moins de 100	Plus de 100			
Efforts respiratoires	Absents	Lents irréguliers	Bons pleurs			
Tonus musculaire	Flasque	Flexion des extrémités	Mouvements actifs			
Réflexes à la stimulation	Absents	Grimace	Pleure avec force			
Coloration des téguments	Bleue pâle	Corps rose extrémités bleues	Entièrement rose			
Remarques			Total			

Nom du médecin qui suit l'enfant | Date

ÉVOLUTION DE LA MÈRE

Suites de couche
☐ Normales
☐ Anormales

Hb la plus basse _____

Dernière Hb _____

Hémorragie des suites de couche
☐ Immédiate
☐ Tardive

Transfusion _____ sacs

Immunoglobuline anti-D
Donnée le a m j
par

Plèvre ☐ oui ☐ non

Si oui préciser s'il y a lieu

☐ Endométrite ☐ Infection de plaie ☐ Autre
☐ Autre infection pelvienne
☐ Tromboembolie
☐ Infection urinaire
☐ Infection respiratoire

État à la sortie a m j Vivante ☐ Décédée ☐ Transférée ☐

Date

Signature du médecin | Date

AH-272 (rev. 10-88)

DOSSIER DE LA MÈRE

000155

OBSTETRICAL CHART
MEDICAL HISTORY

QUEBEC

Space reserved for the use of the hospital center

Surname _____

Given name(s) _____

Address _____

_____ Telephone No. _____

Age _____ Date of birth _____

Health insurance no. _____

Name of spouse _____

FAMILY HISTORY

Tuberculosis, hypertension, cardiopathy, diabetes, allergy, cancer, neuro-psychiatric diseases, twins, anomalies, genetic diseases

Specify:

MENSTRUAL HYSTORY

MENARCHE	CYCLE	DURATION	L.M.P.	E.D.C.	BIRTH CONTROL METHOD	STOPPED SINCE
Years	Days	Days	yr m day	yr m day		yr m day

PERSONAL HYSTORY (O: negative, +: abnormal, —: not applicable

PAST MEDICAL HYSTORY				RECENT HYSTORY, SINCE L.M.P.			
Renal diseases		Phlebitis, varicose veins		Nausea, vomiting		Other viral infection	
Cardiac diseases		Epilepsy		Constipation		Exposure to radiation X-Rays	
Arterial hypertension		Drug allergies		Headache		Accidents	
Acute articular rheumatism		Allergies		Hemorrhage (specify)		Medication	
Tuberculosis		Blood dyscrasia		Vaginal discharge (specify)		Vaccines	
Veneral diseases		RH.abo incompatibility		Edema		Drugs	
Gynecological diseases		Previous surgery		Bloods transfusions		Alcohol	
Viral infections		Previous accidents		Abdominal pain (specify)		Cigarettes (number)	
Neuro-psychiatric diseases		Pertinant vaccines		Urinary symptoms		Work	
Diabetes		Genetic		Rubella, measles			
Thyroid diseases		Rhogam		Herpes vaginalis			

Specify:

HISTORY OF PAST PREGNANCIES

Total number of previous pregnancies				Term.	Premature			Abortions	Livebirths
No.	DATE yr m day	Type of delivery	Duration of gestation	Duration of labour	Type of anaesthesia	♂	Weight	Complications Mother	Complications Child

AH-288A (rev. 10-80)

Signature _____

MEDICAL RECORD

000156

OBSTETRICAL CHART
MEDICAL HISTORY

Space reserved for the use of the hospital center

Surname _____

Given name(s) _____

Address _____

_____ Telephone No. _____

Age _____ Date of birth _____

Health insurance No. _____

Name of spouse _____

PHYSICAL EXAMINATION

Height (meters) m	Weight before pregnancy Kg	Weight now Kg	
Eyes	Teeth	Pharynx	Thyroid
Neck	Skin	Heart	Lungs
Breasts	Nipples	Tumours	
Abdomen		Spine	
Lower limbs	Edema	Varicose veins	

GYNECOLOGICAL EXAMINATION

Vulva				
Vagina				
Perineum				
Cervix				
Uterus				
		Relationship between size of uterus and weeks of gestation		
Annexae				
Rectal		Pouch of Douglas		
Pelvimetry	Clinical	Promontary	Ischial spines	
	Radiological	Yes ☐ No ☐	If yes, date	yr m day

Dystocia anticipated — Inlet ☐ Midplane ☐ Outlet ☐

Cytology — Yes ☐ No ☐ If yes, date yr m day

Special problems

Type of delivery anticipated	Type of anaesthesia anticipated	Breast feeding anticipated

_____ Date

_____ Signature

AH-287A (rev. 10-80)

HOSPITAL CENTER

000157

Space reserved for the use of the hospital center

OBSTETRICAL CHART

EVOLUTION OF PREGNANCY

Surname _____

Given name(s) _____

Address _____

_____ Telephone No. _____

Age _____ Date of birth _____

Health insurance No. _____

Name of spouse _____

LABORATORY INVESTIGATIONS

B.W. _____ Date _____

Hb _____ Ht _____ Date _____

Mother's Rh group _____ antibodies _____ Cytology _____ Date _____

Urine (summary and culture) _____

E.D.C. according to — yr | m | day

1. L.M.P. |_|_|_|_|_|_|

2. Clinical |_|_|_|_|_|_|

3. Echography |_|_|_|_|_|_|

PRENATAL VISITS (0: negative + : abnormal — : not applicable)

Prenatal courses ☐ Yes ☐ No

L.M.P. DATE yr m day	Weeks of gestation	Height of fundus of uterus	Weight kg	Arterial tension	Albuminuria	Glycosuria	Fetal heart	Nausea	Vomiting	Edema	Position and presentation	Hemoglobin	TREATMENT AND REMARKS Echography, amniocentesis, estriol, stress test, antibodies	Initials
				/										
				/										
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				/										

Remarks:

3

AH-288A (rev. 10-80)

OBSTETRICAL CHART
EVALUATION OF LABOUR

Space reserved for the use of the hospital center

Name of establishment ______________________________

Date of admission ____________ Hour ____ h ____

Date of on set of labour ____________ Hour ____ h ____ ☐ Spontaneous ☐ Induced

Membranes ☐ Intact ☐ Ruptured ____________ h ________ Amniotic fluid ________
Date

STATE OF PATIENT UPON ADMISSION

☐ Shave prep.	Para
☐ Enema	AB
☐ Glycosuria	GR
☐ Albuminuria	D.M.:
☐ Hemogram and blood group	Weeks of gestation
☐ Urine culture	E.D.C.

Physician notified at ________ h ________

Date	Time (0 - 24)	Temperature (°C)	Pulse	Arterial tension	Fetal heart	Contractions: Frequency (min)	Contractions: Duration (sec)	Contractions: Intensity 1 + to 4 +	Membranes I or R	Dilatation (cm)	Effacement	Station	Oxytocic concentration: Milli units (min)	Oxytocic concentration: Microdrips (min)	Treatment and remarks	Initials
				/												
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MEDICAL RECORD

000159

Space reserved for the use of the hospital center

OBSTETRICAL CHART
FRIEDMAN'S CURVE

Name of establishment _____

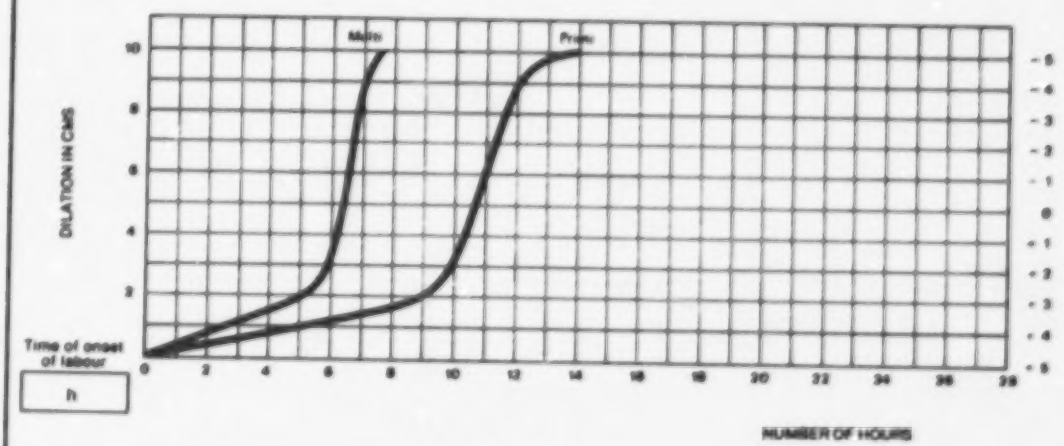
_____

Reason for admission

☐ Ruptured membranes ☐ True labour ☐ Elective c. section

☐ False labour ☐ Other _____

☐ Induction _____



(1) Friedman, Emmanuel A. Labor in Multiparas. Extrait de: Obst. & Gynec. vol. 8 n° 6; 1956. p. 696.

Date	Time	Medication (indicate date, time, name, dosage, and route of administration)	Initials
	h		
	h		
	h		
	h		
	h		
	h		
	h		
	h		
	h		
	h		
	h		
	h		

AM-271A (rev. 10-88)

MEDICAL RECORD

OBSTETRICAL CHART
PREGNANCY, LABOUR AND DELIVERY
EVOLUTION OF THE MOTHER AND
EVALUATION OF THE NEWBORN

Space reserved for the use of the hospital center

Name of establishment ______________________

PREGNANCY, LABOUR AND DELIVERY

L.M.P. yr m day | E.D.C. yr m day | Group and Rh | Antibodies

Par	Gr	Ab	Live children	Peculiarities (complications or diagnostics since this pregnancy or past pregnancies)

Presentation
☐ Vertex ☐ Breech ☐ Other (specify)

Labour
☐ Spontaneous ☐ Induced

Onset of labour yr m day ____ h ____ | 1st stage duration ____

2nd stage duration ____

Membranes ruptured yr m day ____ h ____ | 3rd stage duration ____

Total duration ____

Analgesia during last 4 hours (medicines, dosage)

Corticosteroids (date and hour of 1st dosage)

Anaesthesia
None ☐ General ☐ Paracervical ☐ Epidural ☐ Pudendal ☐ Local ☐

Delivery yr m day ____ h ____

☐ Vaginal ☐ Caesarian section

☐ VERTEX ☐ BREECH
☐ Spontaneous ☐ Spontaneous
☐ Low forceps ☐ Assisted
☐ Mid forceps ☐ Forceps
☐ Rotation

☐ Iterative
☐ Low transverse (indication)
☐ Low median
☐ Classical
☐ Hysterectomy

Indication of caesarian section

Episiotomy
None ☐ Median ☐ Medio-lateral ☐

Laceration
None ☐ Perineal 1 2 3 4 ☐ Cervical ☐ Vaginal ☐ Blood loss ______ cc

Umbilical cord
Clamping
☐ < 45s after delivery
☐ > 45s after delivery

Expression of umbilical cord
☐ Loose
☐ Tight
☐ Cut during delivery
☐ Cut after delivery

Placenta
Mass ______ g
☐ Spontaneous
☐ Manual
☐ Umbilical vessels 2 3

Anomalies

Complications
None ☐ Meconium ☐ Fetal distress ☐

Fetal heart
☐ < 120
☐ 120 160 ☐ Irregular
☐ > 160 ☐ None

Monitoring
☐ Clinic
☐ Out-patient
☐ In-patient

Signature of physician | Date

EVALUATION OF NEWBORN

Sex ☐ ♂ ☐ ♀ ☐ Living ☐ Stillborn Mass ______ g

☐ Ophtalmic drops ☐ Vitamin K ☐ Baptized privately

Nourishment
☐ Maternal ☐ Artificial ☐ Mixed ☐ within maternal

Resuscitation ☐ Yes ☐ No
Ventilation ☐ With sack and mask ☐ Tracheal tube ______ min ☐ Tracheal aspiration

Asphyxia
☐ None ☐ Moderate ☐ Severe

☐ Anomalies
☐ Complications

Remarks

Parents informed ☐ Yes ☐ No

APGAR	0	1	2	1 min	5 min	10 Min
Heart rate	Absent	Slow (below 100)	Over 100			
Resp. rate and effort	Absent	Slowing, irreg.	Good crying			
Muscle tone	Flaccid	Flexion of ext	Active motion			
Reflex irritability	No response	Grimace	Cry			
Color	Blue pale	Body pink ext. blue	All pink			
			Total			

Remarks

Name of physician caring for child | Date

EVOLUTION OF THE MOTHER

Post partum course
☐ Normal
☐ Abnormal

Lowest HGB ______

Last HGB ______

Post partum haemorrhage
☐ Immediate
☐ Late

Transfusion ______ units

Immunoglobulins anti-D
Given
yr m d
per

Fever ☐ Yes ☐ No If yes, state as the case may be
☐ Endometritis ☐ Wound infection ☐ Other
☐ Other pelvic infection
☐ Thrombo-embolism
☐ Urinary infection
☐ Respiratory infection

Condition on discharge
Date yr m day
Alive ☐ Deceased ☐ Transferred ☐

Signature of physician | Date

AH-273A (rev. 10-80)

MOTHER'S RECORD

000161

THE MEDICAL SOCIETY OF NOVA SCOTIA PRENATAL RECORD (REVISED 1982)

NOVA SCOTIA

FOR COPIES CONTACT REPRODUCTIVE CARE PROGRAM 5821 UNIVERSITY AVENUE HALIFAX NOVA SCOTIA B3H 1W3

NAME | ADDRESS | PHONE

DOCTOR | HOSPITAL | MED INS NO

AGE | MENSTRUAL CYCLE | PILL STOPPED | LNMP | EDC

OBSTETRICAL HISTORY

GRAV ______ PARA ______ ABORT ______ ALIVE ______ SB ______ NND ______

PREM ______ IUGR ______ CONG ABN ______ C/S ______

YEAR	WT	GEST	COMPLICATION	HOSPITAL OF DELIVERY

HOSPITAL COPY — Prenatal Score on Flip Side

	YES	NO
BREASTFEEDING		
PRENATAL CLASSES		
ADEQUATE DIET		
ALLERGIES		
MEDICATIONS		
PREV TRANS		

HIGH RISK SCORE

1st VISIT | 36 WEEKS

FAMILY HISTORY — e.g. | DIABETES | HYPERTENSION | TWINS | HEREDITARY DISEASE

PAST HEALTH — e.g. | DIABETES | EPILEPSY | U.T.I. | SURGERY

FUNCTIONAL ENQUIRY — HYPERTENSION | RENAL DIS | SMOKING | ALCOHOL

SOCIAL HISTORY

(OCCUPATION, SPECIAL PARENTING NEEDS, ETC.)

EXAMINATION

DATE | PRE-PREG WEIGHT | B.P. | HEIGHT

HEAD AND NECK | BREASTS | PELVIC

HEART | LUNGS | CX

ABDOMEN | EXTREMITIES | CORPUS

ADNEXA

OBSTETRIC PELVIC ASSESSMENT

LAB DATA

HGB | RUBELLA TITRE

VDRL | BLOOD SUGAR

GROUP | Rh

HUSBAND'S Rh

ANTIBODIES ______

28 WEEK Rh IMMUNE GLOBULIN DATE

URINE	P	S	MICRO	C AND S	PREG. TEST DATE
CERVIX	PAP			G.C. C AND S	QUICKENING DATE

DATE	WT	BP	URINE P / S	GESTATION WEEKS	FUNDAL HEIGHT cm 1SY/BPH	PRESENTATION	FH	RISK SCORE	RETURN IN	HGB AND REMARKS

009162

DELIVERY RECORD

TYPE OF LABOUR

INDUCTION

ANAESTHESIA

DATE OF BIRTH

HOUR OF BIRTH

PRES. POS

BABY-SEX

COMPLICATIONS.

SPONTANEOUS

WEIGHT

BLOOD LOSS

ASPHYXIA NEONATORUM

FORCEPS

L.O./S.O./N.O.O.

THIRD STAGE

EPISIOTOMY

SUTURE

DOCTOR'S SIGNATURE

POSTPARTUM EXAMINATION

DATE

WEIGHT

B.P

HAEMOGLOBIN

URINE

FAMILY PLANNING

LOCHIA

BREASTS

NURSING

BREASTS

PELVIS

CERVIX

PERINEUM

STOMA

MATERNAL HISTORY & PHYSICAL

Date Time

Family History: Details:

- ☐ TB
- ☐ Diabetes
- ☐ Allergies
- ☐ Other Specify:
- ☐ Epilepsy
- ☐ Hypertension
- ☐ Heart Disease
- ☐ Nervous & Mental
- ☐ Multiple Birth
- ☐ Hereditary Disease
- ☐ Malignant Hyperthermia

Medical History: Details:

- ☐ Kidney Disease
- ☐ Heart Disease
- ☐ Hypertension
- ☐ Rheumatic Fever
- ☐ Tuberculosis
- ☐ Venereal Disease
- ☐ Gyn. Disorder
- ☐ German Measles
- ☐ Nervous & Mental
- ☐ Diabetes
- ☐ Thyroid Function
- ☐ Phlebitis, Varicos.
- ☐ Blood Dyscrasia
- ☐ Allergies
- ☐ Drug Reactions
- ☐ Blood Transfusions
- ☐ RH, ABO Sensitivity
- ☐ Operations, Accidents
- ☐ Other:

History Since last Menstrual Period: Details

- ☐ Nausea
- ☐ Vomiting
- ☐ Indigestion
- ☐ Constipation
- ☐ Headache
- ☐ Edema
- ☐ Bleeding (Specify)
- ☐ Vaginal Discharge
- ☐ Abdominal Pain
- ☐ Urinary Complaints
- ☐ German Measles
- ☐ Other Virus
- ☐ Radiation (Specify)
- ☐ Accidents
- ☐ Medications
- ☐ Other:

Menstrual History: Onset at age ☐ Pattern: ☐ days

LMP ☐ Normal? Yes ☐ No ☐

EDC ☐ Present Gestation ☐

DATES: Last B.C. Pill ☐ Pos. Preg. Test ☐ First ☐

Summary of Previous Pregnancies (Include Abortions): No. of Living Children ☐

No.	Year	Place of Confinement	Gest.	Dur. of Labour	Type of Delivery	Weight	Sex	Complications

Signature

BCP/81

DATE/TIME	

RCP/01

MATERIAL HISTORY & PHYSICAL

Physical Examination:		
Ht.:	Pres. Wt.	Wt. at LMP
Optic Fundi	Teeth	Thyroid
Heart	B.P.	ENT.
Lungs	Skin	
Breasts	Nipples	Tumors
Abdomen	Height of Fundus	
Fetal Heart	Presentation and Position	Amniotic Fluid Vol.
Extremities	Varicosities	Edema
Pelvic Exam:	CNS	Reflexes

Labour: ☐ Yes ☐ No ☐ Suspected

Risk Score [ ]

Low Risk = 0 - 2
High Risk = 3 - 6
Extreme Risk = ≥ 7

Summary Diagnoses, Problems and Management:

Date/Time _____ _____ **Signature**

RCP/01

ANTE-NATAL RISK ASSESSMENT

I Reproductive History

< 16 = 1
Age 16 - 35 = 0
> 35 = 2 ☐

0 = 1
Parity 1 - 4 = 0
5+ = +2 ☐

Past OB History

Habitual Abortion/ Infertility	= 1	☐
P.P.H./Manual Removal	= 1	☐
Baby 9 lbs. (4082 gm.)	= 1	☐
Baby 5.5 lbs. (2500 gm.)	= 1	☐
P.E.T./Hypertension	= 1	☐
Previous Caesarean	= 2	☐
Stillbirth or Neonatal Death	= 3	☐
Prolonged Labour or Difficult Delivery	= 1	☐

Category Score _____

II Associated Conditions

Previous Gynecological Surgery	= 1	☐
Chronic Renal Disease	= 2	☐
Gestational Diabetes	= 1	☐
Diabetes Mellitus	= 3	☐
Cardiac Disease	= 3	☐

Other Medical Disorders

(Chronic Bronchitis, Lupus, etc.) ☐

Score according to Severity (1 to 3) ☐

Category Score _____

III Present Pregnancy

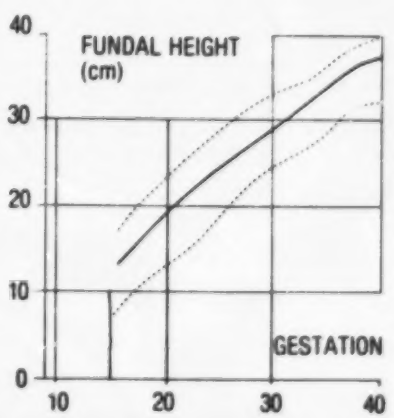
Bleeding

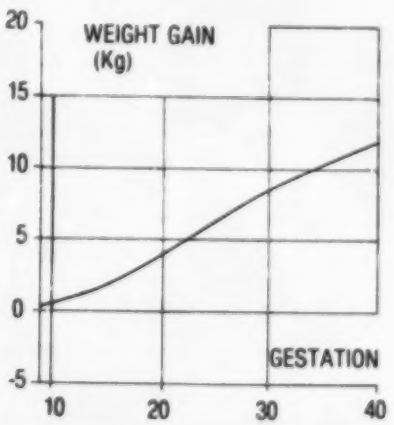
< 20 Weeks	= 1	☐
≥ 20 Weeks	= 3	☐
Anemia < 10 GM %	= 1	☐
Prolonged Pregnancy (42 Weeks)	= 1	☐
Hypertension	= 2	☐
Premature Rupture Membranes	= 2	☐
Polyhydramnios	= 2	☐
Small For Dates	= 3	☐
Multiple Pregnancy or Breech or Malpresentation	= 3	☐
RH Isoimmunization	= 3	☐

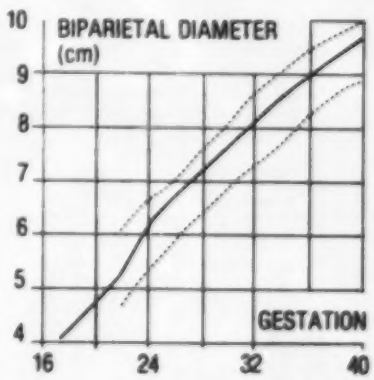
Category Score _____
Total Risk Score _____

Coopland & Al. Time

Low Risk	0 - 2
High Risk	3 - 6
Extreme Risk	≥ 7







I RCP/01

ANTEPARTUM/INTRAPARTUM NURSING ADMISSION

Admission

Date

Time

Method of Admission
- ☐ Ambulatory
- ☐ Wheelchair
- ☐ Stretcher

Accompanied by

Is this your usual hospital of obstetrical care ☐ Yes ☐ No

If no, referral by physician ☐ or self ☐

Reproductive History

Grav.
Para
Abort
S.B.
N.D.

LMP
EDC/dates
GEST. in wk.

Prenatal Complications: ☐ Yes ☐ No Specify:

Prev. Adm. this preg. ☐ Yes ☐ No When?

Prev. C/S ☐ Yes ☐ No Specify:

Lab

	Date		
Blood Grp.		VDRL	
Rh Titre		Hgb (Adm)	
Rh Serum		Rubella Titre	

Date Where

Pelvic X-Ray: ☐ Yes ☐ No

Ultrasound: ☐ Yes ☐ No

Other Tests: ☐ Yes ☐ No

Specify

Pertinent History

	Yes	No	Specify:
Drug Allergies:	☐	☐	
Other Allergies:	☐	☐	
Medications:	☐	☐	
Non-Medical Drugs:	☐	☐	
Special Diet:	☐	☐	
Dentures:	☐	☐	
Contact Lenses:	☐	☐	
Glasses:	☐	☐	

Smoker: ☐ Yes ☐ No Cig./Day in Preg. Cig./Day before Preg. No. of Yrs.

Alcohol: ☐ Yes ☐ No Drinks/Wk in Preg. Drinks/Wk before Preg. No. of Yrs.

Reason for Admission

Labor ☐ Yes ☐ No (if yes)

Prep ☐ Yes ☐ No

Enema ☐ Yes ☐ No

Physical Assessment

Pres. Wt.
Wt. Gain
Fundal Ht.

Abd. Palpation:
Presentation
Position
Engagement

T
P
R
FH

BP
Reflexes
Edema

URINE:
Protein
Sugar
Acetone

Additional Information

	Yes	No
Prenatal Classes:	☐	☐
Breast Feeding	☐	☐
Rooming In:	☐	☐
Keeping Baby:	☐	☐
Seeing Baby:	☐	☐
Social Worker Consult:	☐	☐

Patient's Requests:

Nursing Plan/Comments

High Risk Score

Time Dr. Notified

Dr.

Signature

RCP/02

PARTOGRAM

Admission Date

Time: hrs.

Last Solid Food Intake Date:

Time: hrs.

Time Dr. Notified

Dr.

Onset Regular Conts. Date Time hrs.

Membranes:

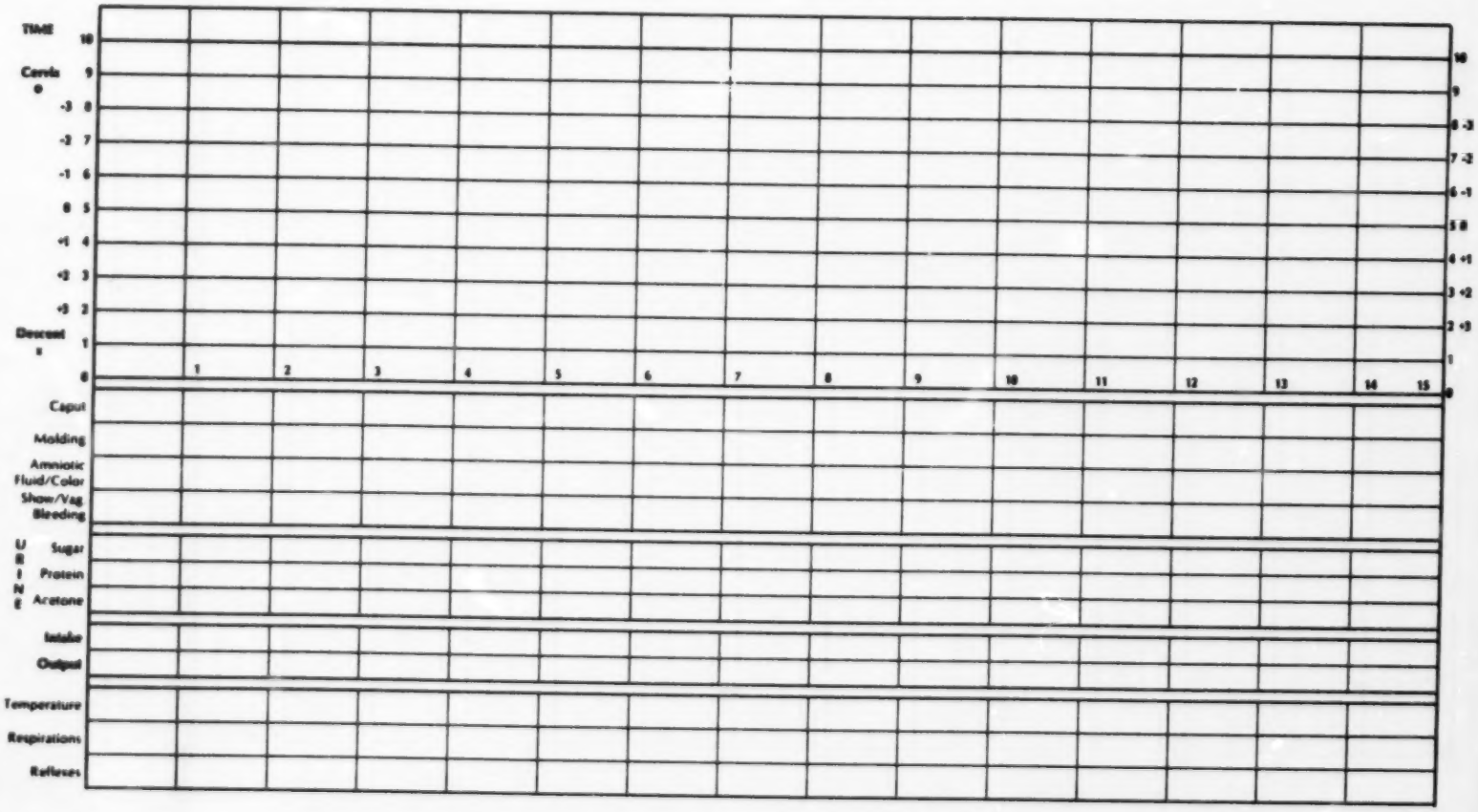
Intact
S.R.M.
A.R.M.
Questionable

Date Time hrs.

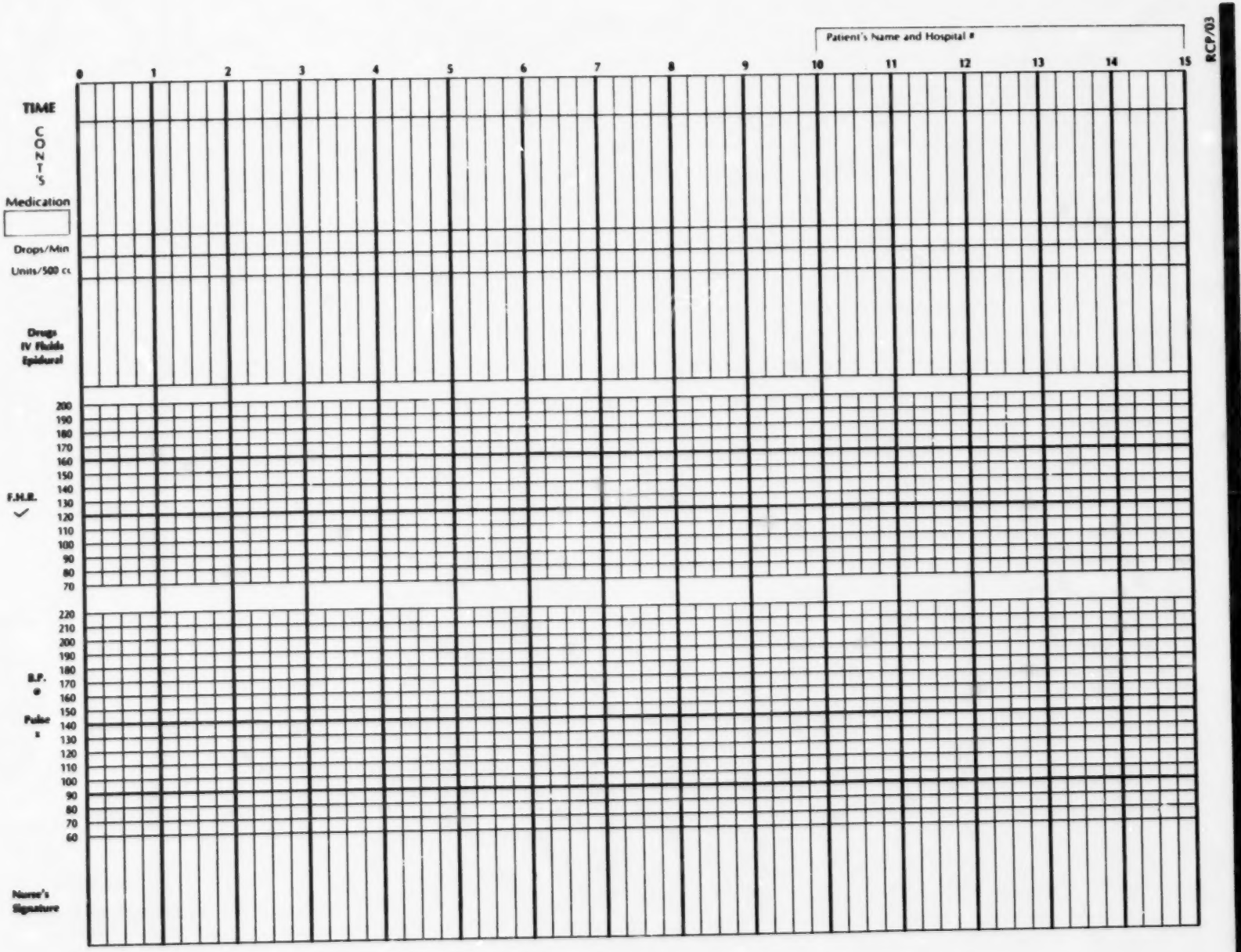
Date Time hrs.

Color of Fluid

Quantity of Fluid



RCP/83


Patient's Name and Hospital #
RCP/03
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
TIME
CONT'S
Medication
Drops/Min
Units/500 cc
Drugs
IV Fluids
Epidural
F.H.R.
200 190 180 170 160 150 140 130 120 110 100 90 80 70
B.P.
Pulse
220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60
Nurse's
Signature

021000

IMMEDIATE POSTPARTUM

	Initial P.P. checks			15 min x 5			30 min x 2			1 hr. x 4					
Time															
B.P.															
Pulse															
Lochia															
Fundus															
Episiotomy															
Voiding															
Nsg. Signature															

Infant:

Transfer Time
To Nursery _____

Condition _____

Signature _____

Mother:

Transfer Time
to Postpartum _____

Condition _____

Signature _____

Date	Time	

RCP/03

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Delivery Room Data

Fully Dilated: Date _____ Time _____ hrs.

Transferred to Delivery Room _____ At _____ hrs.

Electronic Monitoring: Yes ☐ No ☐

F.H. after every cont. in 2nd Stage if not monitored

F.H. Taken Last: Rate _____ Time _____ hrs.

Summary of F.H.R. Tracing: _____

Nurse's Delivery Room Note:

_____

Signature of Nurse

Mother's Companion: None ☐ Male ☐ Female ☐ Present During Labour ☐ Present At Delivery ☐

Neonatal Backup: Yes ☐ No ☐ Indication _____ Time Called _____ hrs. Time Arrived _____ hrs.

Catheterized: Yes ☐ No ☐ Time _____ hrs. Type _____

Sutures: Yes ☐ No ☐ Type _____ Sponge Count Correct Yes ☐ No ☐

Needle Count Correct Yes ☐ No ☐

Fill In If Applicable:

Doctor _____ Time Called _____ Time Arrived _____

Resident _____ Intern _____ Student _____

Anaesthetist _____ Resident Anaesthetist _____ Scrub Nurse _____

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LABOR DELIVERY RECORD

LMP ☐ E.D.C. ☐ Gestn. At Del. ☐
☐ Singleton ☐ Twins ☐ Other

Antepartum Status
Grav. ☐ Para ☐ Abort ☐ S.B. ☐ N.N.D. ☐

ABO ☐ Rh ☐
BLOOD GR. ☐
Rh TITRE ☐
VDRL ☐
HGB ☐
Rubella Titer ☐

Press Firmly

MEDICAL HISTORY
☐ Normal
☐ Abnormal Specify:

Problems Prev. Preg. or Infant
☐ No
☐ Yes Specify:

COMPLICATIONS OF THIS PREGNANCY
☐ Bleeding ☐ Toxemia ☐ None
☐ PROM ☐ Prem. Labour ☐ Diabetes
☐ Other Comment: ☐ IUGR

MEDICATIONS ☐ Yes ☐ No Specify:
SMOKING ☐ Yes ☐ No Cigs/Day ☐

FIRST STAGE: Onset Date ☐ Time ☐ hrs. Duration ☐

☐ Spontaneous
☐ Induced → ☐ Arm ☐ Oxytocin ☐ Prostaglandin
☐ Stimulated → ☐ Arm ☐ Oxytocin ☐ Prostaglandin

Indication For Induction:

MEMBRANE RUPTURE Date ☐
☐ Spont. Time ☐ hrs.
☐ Questionable Duration at Delivery ☐ hrs.
☐ Arm
☐ T. ≥ 38 in Labour

☐ **MECONIUM** ☐ Yes ☐ No
Time First Noted ☐

SECOND STAGE: Onset Date ☐ Time ☐ Duration ☐

FETAL HEART
☐ Normal
☐ Abnormal Specify:

DELIVERY: Date ☐ Time ☐
☐ Spontaneous
☐ Precipitate
☐ Operative Position at Delivery ☐

Forceps: ☐ Easy ☐ Moderate ☐ Difficult ☐ Trial only ☐ Outlet ☐ Low Mid ☐ Mid

Last Fetal pH ☐ Time ☐ hrs.
Last Maternal Blood Sugar Date ☐ Time ☐ hrs.

Rotation: ☐ Manual ☐ Forceps
Position at Interference ☐
Position at Delivery ☐

Breech: ☐ Spont. ☐ Assisted ☐ Forceps ☐ Extracted

Caesarean: Uterine Incision ☐ Trans. ☐ Vertical ☐ Hysterectomy

DRUGS TIME	(Within 24 Hours) Drug/Dose/Route

Indication for Operative Procedure

Episiotomy: ☐ None ☐ Midline ☐ Mediolateral

Lacerations: ☐ None ☐ Cervical ☐ Vaginal ☐ Anal Sphincter ☐ Anal Mucosa ☐ Perineal ☐ Sutures

THIRD STAGE: Completed Date ☐ Time ☐ hrs. Duration ☐

Placenta Delivery ☐ Weight ☐ gm. Abnormalities:

☐ Spont. ☐ Assist. ☐ Manual

UMBILICAL VESSELS ☐ 3 ☐ 2

Oxytocic: ☐ None ☐ Before Separation ☐ After Separation
Type ☐ Dose ☐ Route ☐

Blood Loss
Before Del. ☐ ml.
After Del. ☐ ml.

☐ Oxytocin Drip Postpartum P.P.H. ☐ Yes ☐ No

Anaesthesia:
☐ None ☐ Epidural ☐ Local ☐ General ☐ Pudendal ☐ Other
Lowest B.P. ☐
Start Time ☐
☐ Wedge used (15° Tilt)

BABY: ☐ Girl ☐ Boy Weight ☐ gm.

☐ Liveborn
☐ Stillbirth: Date Last Fetal Movements ☐ Date Last Fetal Heart ☐

CONDITION AT BIRTH:	1 min.	5 min.
Tone		
Colour		
Respiration		
Response		
Heart Rate		
APGAR SCORE		

Age First Breath ☐ min.
Age at First Cry ☐ min.
Age Sust. Resp. ☐ min.

EYE MED'S ☐

Asphyxia: ☐ None ☐ Moderate ☐ Severe
☐ Cord pH Done

RESUSCITATION: ☐ None ☐ Oxygen Only ☐ Pos. Pres. Bag and Mask ☐ Pos. Pres. Bag and Tube
Pos. Pres. Began Age ☐ to ☐

INFANT EXAM: ☐ Normal ☐ Abnormal Specify:

Signature _____

Nurse Attending _____ Delivered by Physician _____

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MATERNAL POSTPARTUM FLOW SHEET

Date	Time	Breasts Normal (N) Engorged (E)	Fundus [illegible]	Lochia Rubra (R) Serosa (S) Alba (A)	Episiotomy OK (✓) [illegible]	Voiding normal (N)	B.M.	Homan's Sign (-) Sign (+)	Medication & Progress

RCP/05

PROGRESS REPORT SHEET (NORMAL) AND TEACHING GUIDE

Tick (✓) or use symbol where appropriate
Use (S) where abnormal and describe on Progress Notes

Date										
Breasts: Normal (N) Engorged (E)										
Fundus: b ↑ or ↓ o										
Lochia: Rubra (R) Serosa (S) Alba (A)										
Incision — OK (✓)										
Episiotomy — OK (✓)										
Homan's: Sign (—) Sign (+)										
B.M.										
Suppos. Results — good ✓ nil 0										
Enema — effective ✓ non-effective 0										
Voiding-normal (N)										
Nurse's Signature 0730 - 1900 or day										
1900 - 0730 or evening										
Students or nights										

Patient Teaching	Date / Signature	Comments	Patient Teaching	Date / Signature	Comments
Perineal Care			Pre-Op Teaching		
Sitz Bath			Post-Op Teaching		
Raw Breast Care			Incision Care		
Breast Feeding			Discharge Teaching		
Self Breast Exam					
Baby Bath			Infant Nutrition		
Return Bath			Family Planning		
Formula Prep./Feeding			Breast Feeding		
Diapering/ Positioning			Exercises		
			Planning Discussion		

RCP/86

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MATERNAL & NEWBORN
PROGRESS SHEET

Date Time	

RCP/06

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PHYSICIAN
NEWBORN ADMISSION & DISCHARGE

Birth Date	Birth Weight (gm.)	Head Circ. (cm.)	Body Length (cm.)

Clinical Gestational Assessment

	<36 wk.	36-37 wk.	38-40 wk.	41 + wk.
Breast Tissue	☐ Absent	☐ 2mm	☐ 4mm	☐ 7mm
Sole Creases	☐ Single Ant. Crease	☐ Anterior 1/3	☐ Few Posterior	☐ Full
Ear Cartilage	☐ Nil	☐ Some	☐ Stiff	
Testes	☐ In Canal	☐ Descended		
Scrotum	☐ Few Rugae	☐ More		

Gestational Age (Dates) _____ wk.
Gestational Assessment (Physical Exam) _____ wk.

Hypoglycemia Screening Yes ☐ No ☐
Time _____
Dextrostix Results _____

Admission Exam ☑ Normal ☒ Abnormal

- ☐ General — Tone, Activity, Colour
- ☐ Skin
- ☐ Nutritional Status — Soft Tissue Wasting ☐ Yes ☐ No
- ☐ Skull Shape
- ☐ Fontanelle and Sutures
- ☐ Eyes
- ☐ Ears
- ☐ Nose
- ☐ Mouth
- ☐ Palate
- ☐ Respiratory System
- ☐ Heart
- ☐ Femoral Pulsations
- ☐ Abdomen - Liver (.....cm.)
  Spleen (.....cm.)
- ☐ Umbilicus
- ☐ Anus
- ☐ Genitalia
- ☐ Neurological
- ☐ Skeletal. Clavicle
  Hips
  Feet

Date _____ Signature _____

Comments

Date _____ Signature _____

Discharge Exam ☑ Yes **Comments if Abnormal**

- ☐ Tone and Activity
- ☐ Skin — Jaundiced ☐ Yes ☐ No
- ☐ Heart
- ☐ Respiratory
- ☐ Umbilicus
- ☐ Circumcision
- ☐ Feeding ☐ Breast ☐ Bottle Formula Type
- ☐ Discharge Weight _____ gm.
- ☐ Blood Group _____
- ☐ Hgb _____

Discharge Diagnosis

- ☐ Normal
- ☐ Other

Date _____ Signature _____

Comments

Date _____ Signature _____

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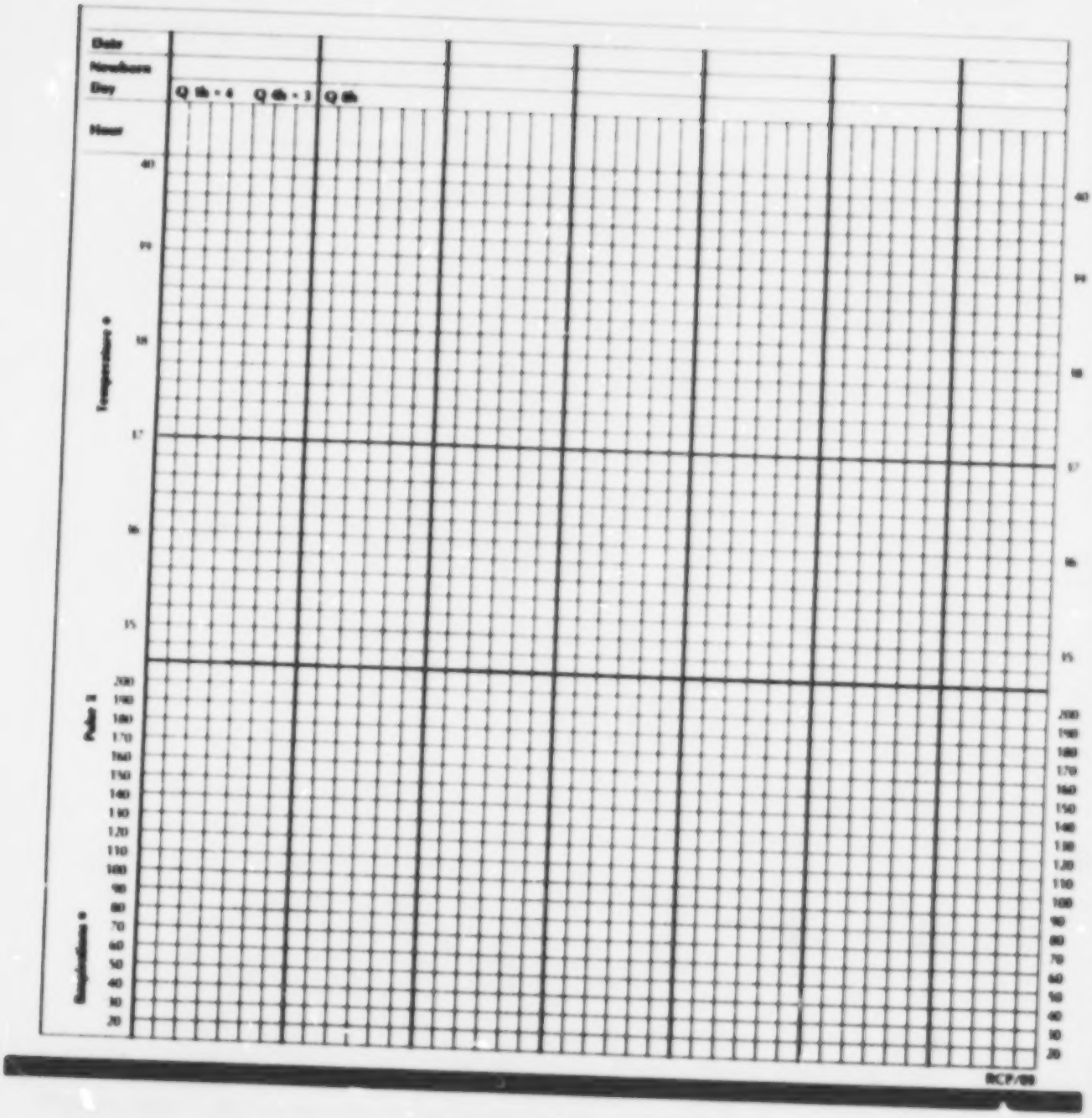
NEWBORN T.P.R.



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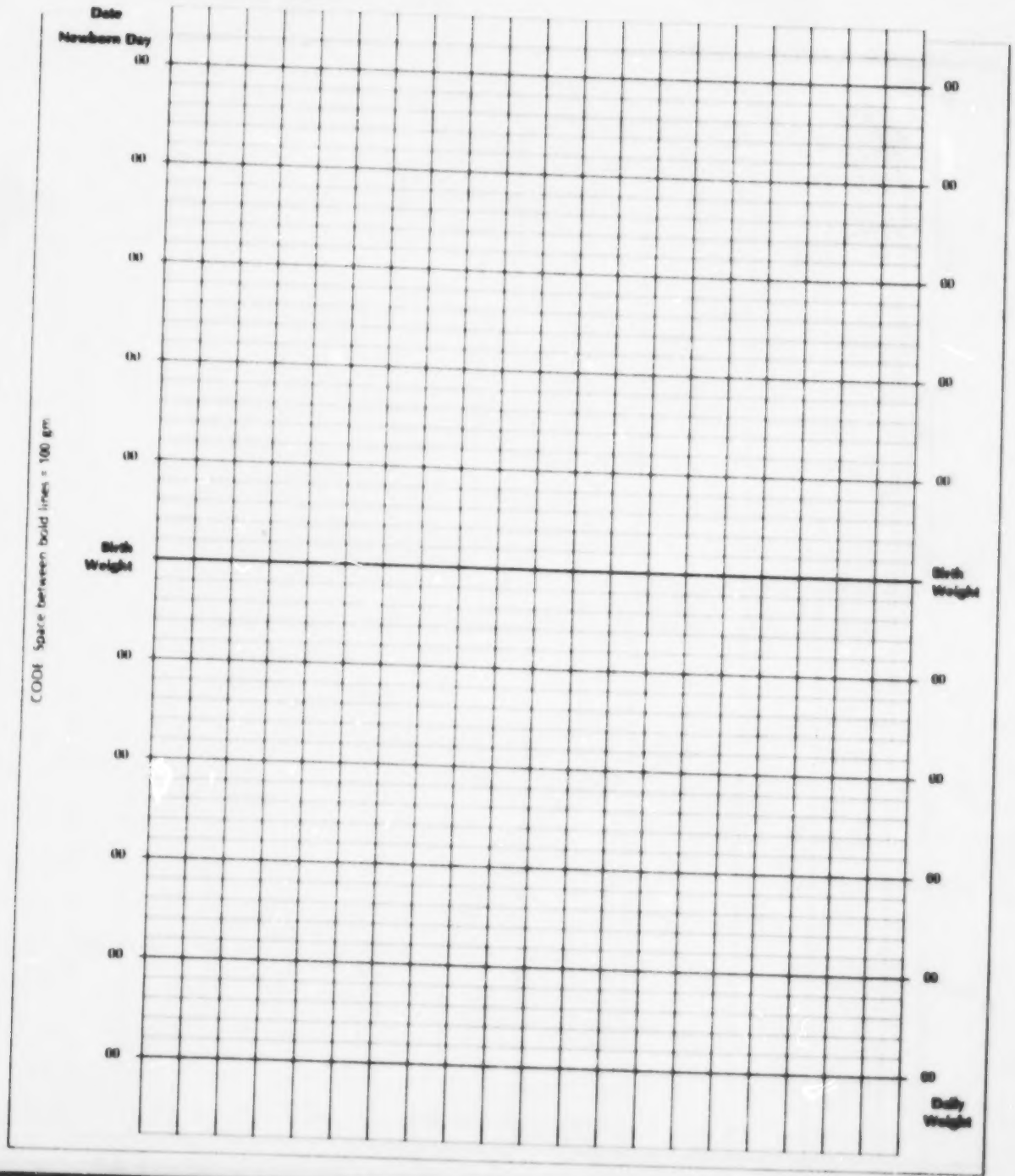
NEWBORN WEIGHT GRAPH



BCP/10

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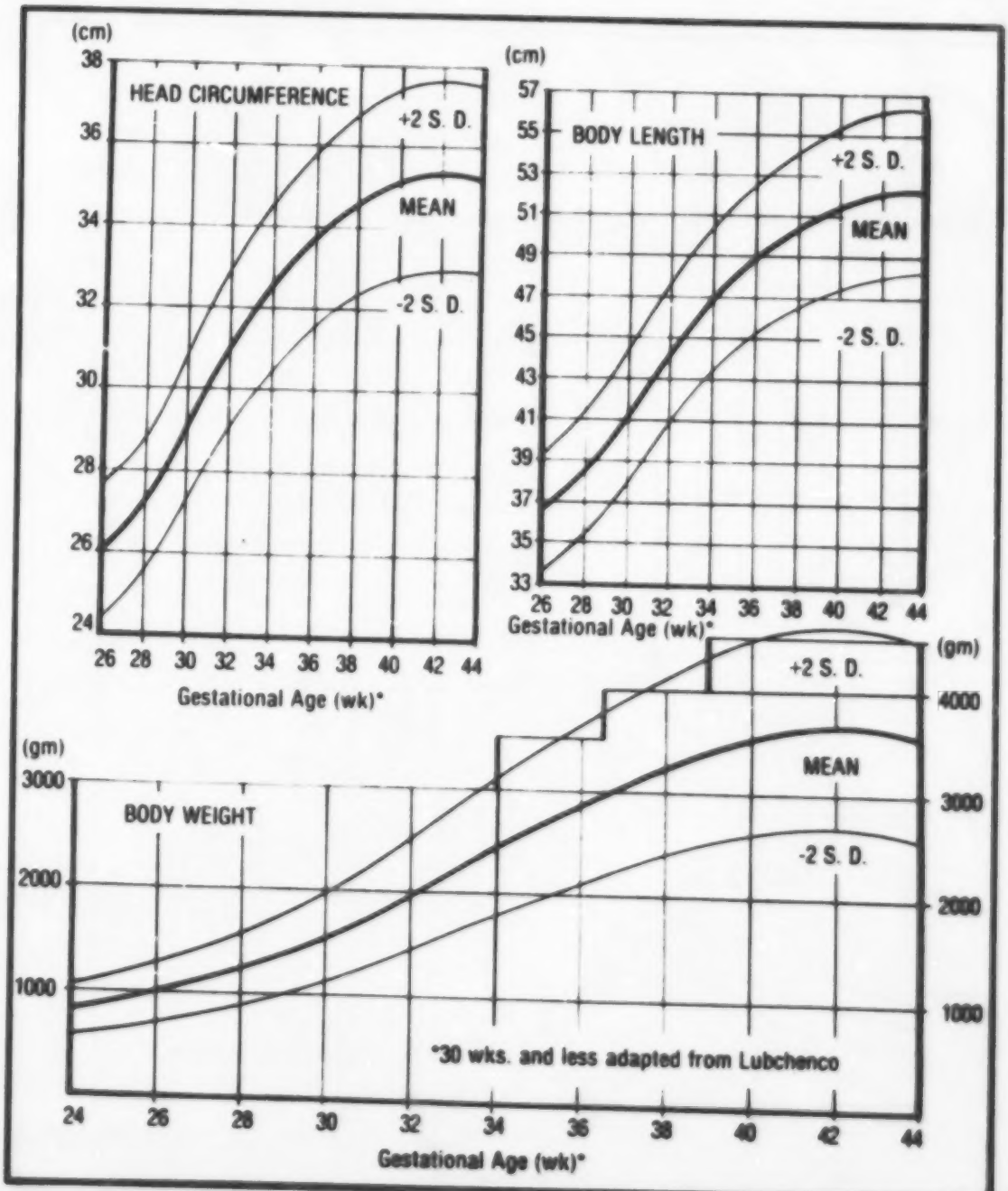
NEWBORN NURSING NOTES

Newborn Day	Date	Time	Color	Tone	Urine	Stool	Feeding	Remarks

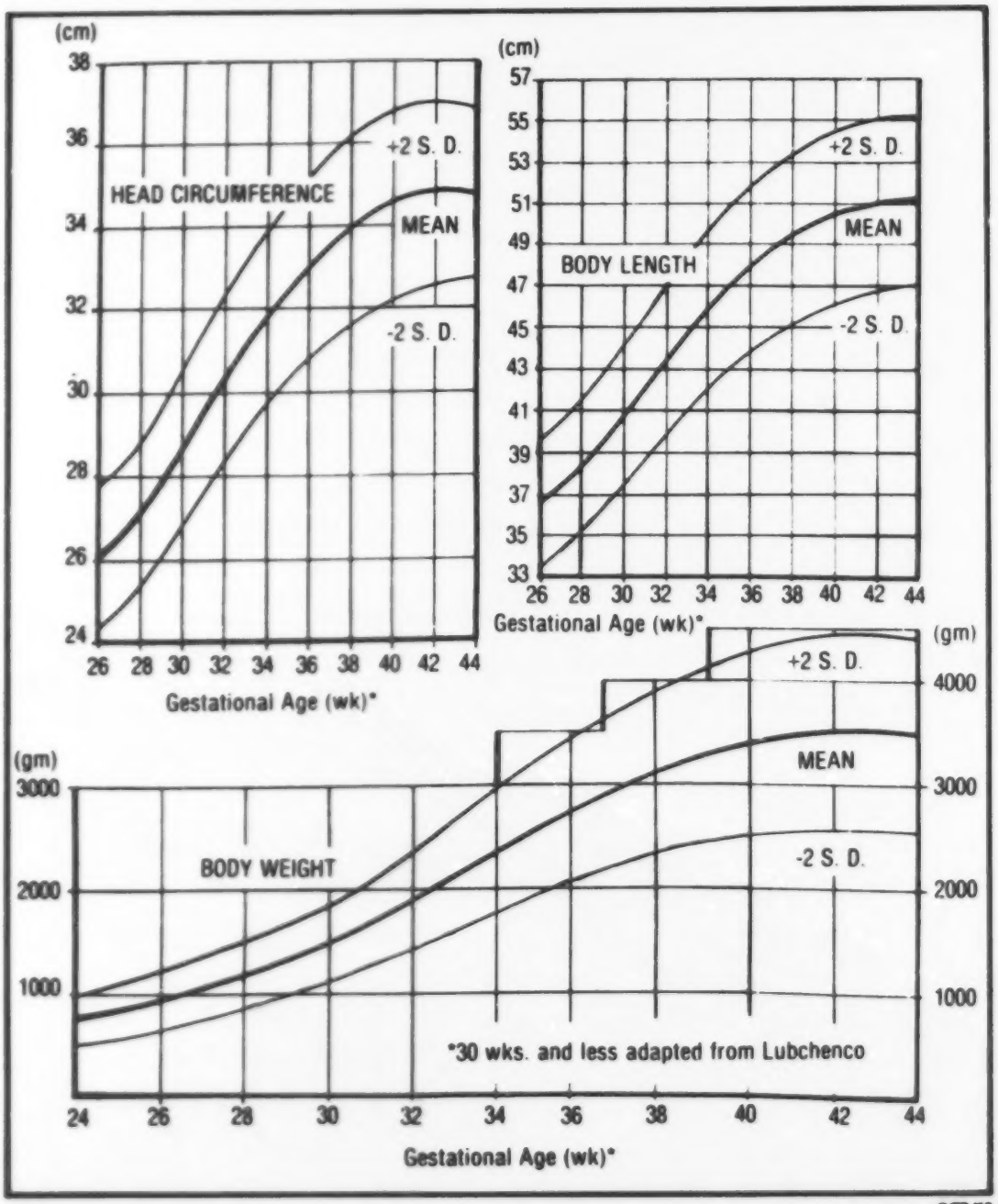
BCP/11

ATLANTIC
NEWBORN MALE GROWTH CHART



RCP/12

ATLANTIC
NEWBORN FEMALE GROWTH CHART



NEWFOUNDLAND AND LABRADOR
PRE-NATAL RECORD

HOSPITAL

NAME

ADDRESS

RELIGION TELEPHONE

D.O.B. AGE OCCUPATION ETHNIC GROUP

HUSBAND'S NAME AGE OCCUPATION

DOCTOR'S NAME

TOPICS FOR DISCUSSION

PRE-NATAL CLASSES
VITAMIN IRON
DIET AND WEIGHT
SMOKING
ALCOHOL
MEDICATIONS
CLOTHES
BOOKS
EXERCISE
REST
COITUS
BOWELS
BATHS
GENETIC COUNSELLING
NOTE OF DATE OF QUICKENING
BREAST FEED
BREAST CARE
POSSIBILITY OF C.S.
HOSP. ADM. PROCEDURES
ANAES. AND ANALG.
LABOUR STAGES
BABY CARE
ACCOMMODATION

MENSTRUAL HISTORY

L.M.P. E.D.C.

CYCLE DURATION

NORMAL SURE ABNORMAL UNSURE

BIRTH CONTROL TYPE

NONE ☐ DATE DISCONTINUED

PREGNANCY TEST POSITIVE (DATE)

PREVIOUS PREGNANCIES INCLUDING ABORTIONS

DATE	PLACE	GEST	HRS OF LAB	TYPE OF DEL	COMPLICATIONS	B.W.	SEX	CONDITION OF BABY & PRESENT HEALTH

PAST ILLNESSES

RENAL ☐
CARDIAC ☐
DIABETES ☐
INFECTIONS ☐
RUBELLA ☐
V.D. ☐
OPERATIONS ☐
TRANSFUSIONS ☐
EPILEPSY ☐
OTHER ☐

CURRENT MEDICATIONS

ALLERGIES

HISTORY OF PRESENT PREGNANCY

VOMITING ☐
BLEEDING (WHEN) ☐
SMOKING ☐
ALCOHOL ☐
DRUG USE ☐
NUTRITION ☐
X-RAY ☐
OTHER ☐

EXAMINATION

GENERAL CONDITION WEIGHT ____ HEIGHT ____

HEAD AND NECK

CHEST

C.V.S.

BREASTS

ABDOMEN

EXTREMITIES (VARICOSITIES)

NEUROLOGICAL

PELVIC EXAMINATION

VULVA

VAGINA

CERVIX

UTERINE SIZE

ADNEXA

FAMILY HISTORY

DIABETES ☐
CARDIAC ☐
HYPERTENSION ☐
T.B. ☐
TWINS ☐
GENETIC ☐
MALFORMATIONS ☐
OTHER ☐

WHITE COPY: MOTHER'S HOSPITAL CHART **YELLOW COPY: PHYSICIAN'S COPY** **Please print firmly.**

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LABORATORY DATA

DATE	GEST	HB	COOMBS	ANTIBODIES

BL GP ______ RH ______ HUSBAND'S RH ______ RHOGAM GIVEN ______

VDRL ______

RUBELLA ______

PAP ______

M.S.U. ______

OTHER INVESTIGATIONS (INCLUDE DATE) e.g. ULTRASOUND, AMNIOCENTESIS, G.T.T., ESTRIOL ESTIMATION

RISK FACTORS ANTICIPATED

PREGNANCY

LAB. AND DEL.

NEWBORN

CONSULTATION DATE

INITIAL RISK CATEGORY A B C N

FINAL RISK CATEGORY A B C N

*PLEASE REFER TO RISK GRADING GUIDE.

SUMMARY

NAME AGE G P A L.M.P. E.D.C. QUICKENING

DATE	WGT PRE PREG.	B.P.	URINE ALB/SUG	EDEMA	DUR WKS	SIZE OF FUNDUS WKS. CM	PRES POSITION	F.H.	RISK A/B/C N	REMARKS	RET IN

CLINICAL ASSESSMENT OF PELVIS

HOSPITAL INFORMATION

BREAST FEEDING PRE-NATAL CLASSES PREP TYPE

ROOMING IN HUSBAND IN

SUMMARY OF DELIVERY

POST-PARTUM VISIT DATE

A GUIDE TO PREGNANCY RISK GRADING

The risk factors or problems listed below are intended as examples only and the list is not exclusive. This risk grading system is intended as a basis for planning ongoing management of the pregnancy.

GRADE C Pregnancy at high risk

Pregnancies which are so complicated that the fetus and/or mother are obviously in danger. Wherever possible, these patients should be transferred to a regional hospital for intensive care and delivery.

- DIABETES CLASS C, D, F, R, OR SIGNIFICANTLY COMPLICATED
- RENAL DISEASE WITH HYPERTENSION + ↓ FUNCTION
- PREMATURE RUPTURE OF MEMBRANES (+ SEPSIS)*
- PROLONGED RUPTURE OF MEMBRANES MORE THAN 6 HOURS, ANTEPARTUM BLEEDING, CONTINUING OR REPEATED*
- HYPERTENSION WITH SUPERIMPOSED TOXAEMIA
- EARLY UNCONTROLLED PREMATURE LABOUR*
- SEVERE FETAL GROWTH ARREST (- 10th Percentile)
- HEART DISEASE, ESPECIALLY WITH FAILURE
- SEVERE PREECLAMPSIA

*particularly 24 - 34 wks gestational age

GRADE B Pregnancy at risk

The fetus and/or mother are definitely at risk and consultation should be obtained with a specialist obstetrician in your area. A plan of management will be suggested by him which may include collaborative care for the rest of the pregnancy with delivery usually in the regional hospital.

- DIABETES, CLASS A (GESTATIONAL) OR CLASS B
- HYPERTENSION WITHOUT TOXAEMIA
- APH, CEASED AND IN HOSPITAL
- CERVICAL INCOMPETENCE
- HYDRAMNIOS
- POST-DATE PREGNANCY (42 weeks +)
- HISTORY OF PRIOR STILL BIRTH OR NEONATAL DEATH
- MATERNAL OBESITY
- SIGNIFICANT TOBACCO, ALCOHOL, DRUG INTAKE
- RHESUS IMMUNIZATION
- RENAL DISEASE WITHOUT HYPERTENSION
- MILD TOXAEMIA
- CONTROLLED PREMATURE LABOUR
- MULTIPLE PREGNANCY
- BREECH PRESENTATION OR MALPRESENTATION
- PRIMIGRAVIDA (age 15 and below, 35 and above)
- HISTORY OF GENETIC OR METABOLIC DISEASE IN FAMILY (Genetic Amniocentesis or Counselling required)
- ANAEMIA NOT RESPONDING TO IRON (- 10 gm)
- WEIGHT GAIN - 10 LBS BY 30 WEEKS
- PREVIOUS GROWTH RETARDATION, PREMATURE LABOUR, OR CAESAREAN SECTION

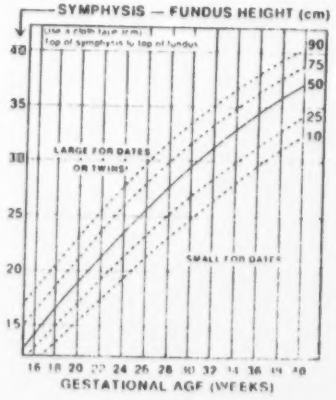
GRADE A Pregnancy at no predictable risk

- NO PRIOR PERINATAL MORTALITY OR LOW BIRTHWEIGHT INFANT
- NO SIGNIFICANT MEDICAL DISEASE
- NO PREGNANCY COMPLICATIONS NOW OR IN THE PAST (Bleeding, Hypertension, Premature Labour)
- FETAL GROWTH SEEMS ADEQUATE

GRADE N Newborn at risk

Delivery in a high risk center should be considered if there is reason to suspect probable neonatal problems based on past or family history.

- PREVIOUS SEVERE RDS, SEIZURE DISORDERS, HIRSCHSPRUNG'S DISEASE, CYSTIC FIBROSIS, CONGENITAL ANOMALIES



INSTRUCTIONS:

1. Each antenatal visit, measure the symphysis-fundus height (measured with a tape and refer to graph on the left).
2. At each antenatal visit insert your current assessment of pregnancy risk grading (A, B, C or N) in the appropriate column.
3. Two or more minor risk problems can combine to produce a major pregnancy risk.
4. Use this grading as the basis for continuing management of the pregnancy, e.g.
   C Consider transfer
   B Consider consultation

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